ATTACHMENT AP20RECEIPT0 30 JAN 2006

Amendments to the Specification

Please insert the enclosed Appendix A after Page 22 of the application.

marked specification paragraphs

1315LT:20149:26203:1:ALEXANDRIA

APPENDIX A

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HEADER     LYSOZYME CH                    31-Mar-03   XXXX
TITLE      X-RAY STUDY OF CHALAROPSIS LYSOZYME
COMPND     MOL_ID: 1;
COMPND     2 MOLECULE: LYSOZYME CH
COMPND     3 CHAIN: NULL;
COMPND     4 ENGINEERED: NO
SOURCE     MOL_ID: 1;
SOURCE     2 ORGANISM_SCIENTIFIC: CHALAROPSIS SPECIES;
SOURCE     3 ORGANISM_COMMON: FUNGI;
KEYWDS     CHALAROPSIS SP. LYSOZYME
EXPDTA     X-RAY DIFFRACTION
AUTHOR     D.C.CARTER, Z.WANG ET. AL.
REVDAT     1    31-Mar-03          0
JRNL          AUTH    Z.WANG
JRNL          AUTH  2 D.C.CARTER
JRNL          TITL
JRNL          REF
JRNL          REF
JRNL          REFN    ASTM ??????  ?? ISSN 00??-????              00?
REMARK     1 REFERENCE 1
REMARK     1
REMARK     1
REMARK     1
REMARK     1
REMARK     1
REMARK     2
REMARK     2 RESOLUTION. 1.60 ANGSTROMS.
REMARK     3
REMARK     3 REFINEMENT.
REMARK     3    PROGRAM      : CNX 2000.1
REMARK     3    AUTHORS      : Brunger, Adams, Clore, Delano,
REMARK     3                   Gros, Grosse-Kunstleve, Jiang,
REMARK     3                   Kuszewski, Nilges, Pannu, Read,
REMARK     3                   Rice, Simonson, Warren
REMARK     3                      and
REMARK     3                   Molecular Simulations Inc.,
REMARK     3                   (Badger, Berard, Kumar, Szalma,
REMARK     3                    Yip).
REMARK     3
REMARK     3 DATA USED IN REFINEMENT.
REMARK     3    RESOLUTION RANGE HIGH (ANGSTROMS) : 1.60
REMARK     3    RESOLUTION RANGE LOW  (ANGSTROMS) : 30.95
REMARK     3    DATA CUTOFF            (SIGMA(F)) : 0.0
REMARK     3    DATA CUTOFF HIGH        (ABS(F)) :  195581.11
REMARK     3    DATA CUTOFF LOW         (ABS(F)) :    0.000000
REMARK     3    COMPLETENESS (WORKING+TEST)   (%) : 90.3
REMARK     3    NUMBER OF REFLECTIONS             : 18598
REMARK     3
REMARK     3 FIT TO DATA USED IN REFINEMENT.
REMARK     3    CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK     3    FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK     3    R VALUE            (WORKING SET) : 0.182
REMARK     3    FREE R VALUE                     : 0.227
REMARK     3    FREE R VALUE TEST SET SIZE   (%) : 4.9
REMARK     3    FREE R VALUE TEST SET COUNT      : 905
REMARK     3    ESTIMATED ERROR OF FREE R VALUE : 0.008
REMARK     3
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REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3    TOTAL NUMBER OF BINS USED              :   6
REMARK   3    BIN RESOLUTION RANGE HIGH       (A) : 1.60
REMARK   3    BIN RESOLUTION RANGE LOW        (A) : 1.70
REMARK   3    BIN COMPLETENESS (WORKING+TEST) (%) : 61.2
REMARK   3    REFLECTIONS IN BIN    (WORKING SET) :  1960
REMARK   3    BIN R VALUE           (WORKING SET) : 0.217
REMARK   3    BIN FREE R VALUE                    : 0.268
REMARK   3    BIN FREE R VALUE TEST SET SIZE  (%) :  4.3
REMARK   3    BIN FREE R VALUE TEST SET COUNT     :    87
REMARK   3    ESTIMATED ERROR OF BIN FREE R VALUE : 0.029
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3    PROTEIN ATOMS            : 1763
REMARK   3    NUCLEIC ACID ATOMS       :    0
REMARK   3    HETEROGEN ATOMS          :    0
REMARK   3    SOLVENT ATOMS            :  203
REMARK   3
REMARK   3  B VALUES.
REMARK   3    FROM WILSON PLOT           (A**2) : 11.6
REMARK   3    MEAN B VALUE      (OVERALL, A**2) : 11.9
REMARK   3    OVERALL ANISOTROPIC B VALUE.
REMARK   3     B11 (A**2) :   0.90
REMARK   3     B22 (A**2) :  -0.36
REMARK   3     B33 (A**2) :  -0.54
REMARK   3     B12 (A**2) :   0.00
REMARK   3     B13 (A**2) :   0.00
REMARK   3     B23 (A**2) :   0.00
REMARK   3
REMARK   3  BULK SOLVENT MODELING.
REMARK   3    METHOD USED : FLAT MODEL
REMARK   3    KSOL        : 0.395195
REMARK   3    BSOL        : 47.314 (A**2)
REMARK   3
REMARK   3  ESTIMATED COORDINATE ERROR.
REMARK   3    ESD FROM LUZZATI PLOT       (A) : 0.16
REMARK   3    ESD FROM SIGMAA             (A) : 0.10
REMARK   3    LOW RESOLUTION CUTOFF       (A) : 5.00
REMARK   3
REMARK   3  CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3    ESD FROM C-V LUZZATI PLOT   (A) : 0.21
REMARK   3    ESD FROM C-V SIGMAA         (A) : 0.14
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3    BOND LENGTHS                (A) : 0.005
REMARK   3    BOND ANGLES           (DEGREES) : 1.6
REMARK   3    DIHEDRAL ANGLES       (DEGREES) : 24.0
REMARK   3    IMPROPER ANGLES       (DEGREES) : 0.78
REMARK   3
REMARK   3  ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS    SIGMA
REMARK   3    MAIN-CHAIN BOND           (A**2) :  0.98 ;  1.50
REMARK   3    MAIN-CHAIN ANGLE          (A**2) :  1.38 ;  2.00
REMARK   3    SIDE-CHAIN BOND           (A**2) :  1.63 ;  2.00
REMARK   3    SIDE-CHAIN ANGLE          (A**2) :  2.13 ;  2.50
REMARK   3
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REMARK   3  NCS MODEL : NONE
REMARK   3
REMARK   3  NCS RESTRAINTS.                              RMS     SIGMA/WEIGHT
REMARK   3   GROUP  1  POSITIONAL           (A) : NULL ; NULL
REMARK   3   GROUP  1  B-FACTOR          (A**2) : NULL ; NULL
REMARK   3
REMARK   3  PARAMETER FILE  1  : MSI_CNX_TOPPAR/protein_rep.param
REMARK   3  PARAMETER FILE  2  : MSI_CNX_TOPPAR/water.param
REMARK   3  PARAMETER FILE  3  : MSI_CNX_TOPPAR/ion.param
REMARK   3  TOPOLOGY FILE  1  : MSI_CNX_TOPPAR/protein.top
REMARK   3  TOPOLOGY FILE  2  : MSI_CNX_TOPPAR/water.top
REMARK   3  TOPOLOGY FILE  3  : MSI_CNX_TOPPAR/ion.top
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS: NULL
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE                : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION        : 2003
REMARK 200  TEMPERATURE         (KELVIN) : 100
REMARK 200  PH                             : 5.0
REMARK 200  NUMBER OF CRYSTALS USED        : 1
REMARK 200
REMARK 200  SYNCHROTRON             (Y/N) : Y
REMARK 200  RADIATION SOURCE               : NSLS/BNL
REMARK 200  BEAMLINE                       : X12C
REMARK 200  X-RAY GENERATOR MODEL          :
REMARK 200  MONOCHROMATIC OR LAUE   (M/L) : M
REMARK 200  WAVELENGTH OR RANGE       (A) : 1.00040
REMARK 200  MONOCHROMATOR                  :
REMARK 200  OPTICS                         :
REMARK 200
REMARK 200  DETECOTR TYPE                  :
REMARK 200  DETECTOR MANUFACTURER          :
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : HKL/DENZO
REMARK 200  DATA SCALING SOFTWARE          : HKL/SCALEPACK
REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS   :
REMARK 200  RESOLUTION RANGE HIGH     (A) :
REMARK 200  RESOLUTION RANGE LOW      (A) :
REMARK 200  REJECTION CRITERIA  (SIGMA(I)) :
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE     (%) :
REMARK 200  DATA REDUNDANCY                :
REMARK 200  R MERGE                    (I) :
REMARK 200  R SYM                      (I) :
REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  :
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE HIGH (A) :
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE LOW  (A) :
REMARK 200  COMPLETENESS FOR SHELL     (%) :
REMARK 200  DATA REDUNDANCY IN SHELL       :
REMARK 200  R MERGE FOR SHELL          (I) :
REMARK 200  R SYM FOR SHELL            (I) :
REMARK 200  <I/SIGMA(I)> FOR SHELL         :
REMARK 200
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REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
REMARK 200 SOFTWARE USED:
REMARK 200 STARTING MODEL:
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS    (%):
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA):
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: FREE TEXT GOES HERE.
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 2(1) 2(1) 2(1)
REMARK 290
REMARK 290        SYMOP    SYMMETRY
REMARK 290        NNNMMM    OPERATOR
REMARK 290
REMARK 290        Put symmetry operators here
REMARK 290
REMARK 290     WHERE NNN -> OPERATOR NUMBER
REMARK 290     WHERE MMM -> TRANSLATION VECTOR
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290    SMTRY1    1
REMARK 290    SMTRY2    1
REMARK 290    SMTRY3    1
REMARK 290    SMTRY1    2
REMARK 290    SMTRY2    2
REMARK 290    SMTRY3    2
REMARK 290
REMARK 290 REMARK: NULL
REMARK 999
REMARK 999 SEQUENCE
SEQADV
SEQRES    1    207    THR VAL GLN GLY PHE ASP ILE SER SER TYR GLN PRO SER
SEQRES    2    207    VAL ASN PHE ALA GLY ALA TYR SER ALA GLY ALA ARG PHE
SEQRES    3    207    VAL ILE ILE LYS ALA THR GLU GLY THR SER TYR THR ASN
SEQRES    4    207    PRO SER PHE SER SER GLN TYR THR GLY ALA THR ASN ALA
SEQRES    5    207    GLY PHE ILE ARG GLY GLY TYR HIS PHE ALA HIS PRO GLY
SEQRES    6    207    GLU THR THR GLY ALA ALA GLN ALA ASP TYR PHE ILE ALA
SEQRES    7    207    HIS GLY GLY GLY TRP SER GLY ASP GLY ILE THR LEU PRO
SEQRES    8    207    GLY MET LEU ASP LEU GLU SER GLU GLY SER ASN PRO ALA
SEQRES    9    207    CYS TRP GLY LEU SER ALA ALA SER MET VAL ALA TRP ILE
SEQRES   10    207    LYS ALA PHE SER ASP ARG TYR HIS ALA VAL THR GLY ARG
SEQRES   11    207    TYR PRO MET LEU TYR THR ASN PRO SER TRP TRP SER SER
SEQRES   12    207    CYS THR GLY ASN SER ASN ALA PHE VAL ASN THR ASN PRO
SEQRES   13    207    LEU VAL LEU ALA ARG TYR ALA SER ALA PRO GLY THR ILE
SEQRES   14    207    PRO GLY GLY TRP PRO TYR GLN THR ILE TRP GLN ASN SER
SEQRES   15    207    ASP ALA TYR ALA TYR GLY GLY ASP SER ASN ILE PHE ASN
SEQRES   16    207    GLY SER ALA ASP ASN LEU LYS LYS LEU ALA THR GLY
SSBOND   1 CYS S  105      CYS S  144
CRYST1   32.202    41.478   112.254  90.00    90.00    90.00 P 21 21 21     4
ORIGX1       1.000000  0.000000  0.000000         0.00000
ORIGX2       0.000000  1.000000  0.000000         0.00000
ORIGX3       0.000000  0.000000  1.000000         0.00000
SCALE1       0.031054  0.000000  0.000000         0.00000
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SCALE2        0.000000  0.024109  0.000000      0.00000
SCALE3        0.000000  0.000000  0.008908      0.00000
ATOM     1  CB  THR   1    14.752  12.361  29.777  1.00 12.11        C
ATOM     2  OG1 THR   1    15.266  11.193  30.429  1.00 13.93        O
ATOM     3  CG2 THR   1    15.319  13.594  30.462  1.00 14.00        C
ATOM     4  C   THR   1    12.670  11.108  29.179  1.00 10.22        C
ATOM     5  O   THR   1    12.241  10.170  29.850  1.00 10.61        O
ATOM     6  N   THR   1    12.735  12.447  31.265  1.00 10.02        N
ATOM     7  CA  THR   1    13.207  12.367  29.852  1.00 10.24        C
ATOM     8  N   VAL   2    12.681  11.101  27.850  1.00  7.67        N
ATOM     9  CA  VAL   2    12.193   9.959  27.083  1.00  7.57        C
ATOM    10  CB  VAL   2    10.881  10.303  26.348  1.00  7.80        C
ATOM    11  CG1 VAL   2    10.365   9.079  25.594  1.00  9.05        C
ATOM    12  CG2 VAL   2     9.843  10.787  27.349  1.00  9.69        C
ATOM    13  C   VAL   2    13.223   9.507  26.051  1.00  7.10        C
ATOM    14  O   VAL   2    13.824  10.327  25.356  1.00  8.31        O
ATOM    15  N   GLN   3    13.411   8.195  25.951  1.00  6.68        N
ATOM    16  CA  GLN   3    14.357   7.612  25.007  1.00  6.05        C
ATOM    17  CB  GLN   3    14.787   6.222  25.481  1.00  7.00        C
ATOM    18  CG  GLN   3    15.764   5.515  24.553  1.00  8.39        C
ATOM    19  CD  GLN   3    17.161   6.094  24.626  1.00  9.98        C
ATOM    20  OE1 GLN   3    17.747   6.185  25.705  1.00 11.70        O
ATOM    21  NE2 GLN   3    17.710   6.479  23.475  1.00  7.12        N
ATOM    22  C   GLN   3    13.743   7.481  23.620  1.00  6.48        C
ATOM    23  O   GLN   3    12.554   7.191  23.476  1.00  7.00        O
ATOM    24  N   GLY   4    14.573   7.695  22.607  1.00  7.27        N
ATOM    25  CA  GLY   4    14.135   7.569  21.231  1.00  7.22        C
ATOM    26  C   GLY   4    15.355   7.307  20.373  1.00  7.87        C
ATOM    27  O   GLY   4    16.443   7.093  20.898  1.00  9.58        O
ATOM    28  N   PHE   5    15.182   7.306  19.057  1.00  7.05        N
ATOM    29  CA  PHE   5    16.305   7.094  18.157  1.00  7.99        C
ATOM    30  CB  PHE   5    16.761   5.615  18.158  1.00  7.80        C
ATOM    31  CG  PHE   5    15.758   4.626  17.594  1.00  7.99        C
ATOM    32  CD1 PHE   5    16.116   3.795  16.532  1.00  8.12        C
ATOM    33  CD2 PHE   5    14.503   4.456  18.172  1.00  9.43        C
ATOM    34  CE1 PHE   5    15.244   2.806  16.060  1.00  7.00        C
ATOM    35  CE2 PHE   5    13.624   3.471  17.708  1.00  8.51        C
ATOM    36  CZ  PHE   5    13.998   2.643  16.649  1.00  7.03        C
ATOM    37  C   PHE   5    15.964   7.554  16.753  1.00  7.90        C
ATOM    38  O   PHE   5    14.813   7.879  16.460  1.00  8.08        O
ATOM    39  N   ASP   6    16.972   7.640  15.896  1.00  9.00        N
ATOM    40  CA  ASP   6    16.724   8.038  14.521  1.00  8.42        C
ATOM    41  CB  ASP   6    17.166   9.484  14.253  1.00  9.95        C
ATOM    42  CG  ASP   6    18.620   9.734  14.573  1.00 10.92        C
ATOM    43  OD1 ASP   6    18.934  10.075  15.734  1.00 10.87        O
ATOM    44  OD2 ASP   6    19.452   9.600  13.656  1.00 11.23        O
ATOM    45  C   ASP   6    17.426   7.072  13.585  1.00  8.94        C
ATOM    46  O   ASP   6    18.514   6.566  13.886  1.00  9.01        O
ATOM    47  N   ILE   7    16.781   6.809  12.456  1.00  8.57        N
ATOM    48  CA  ILE   7    17.299   5.878  11.470  1.00  7.47        C
ATOM    49  CB  ILE   7    16.554   4.530  11.559  1.00  7.69        C
ATOM    50  CG2 ILE   7    16.890   3.836  12.868  1.00  7.11        C
ATOM    51  CG1 ILE   7    15.042   4.765  11.435  1.00  8.76        C
ATOM    52  CD1 ILE   7    14.199   3.496  11.496  1.00  8.80        C
ATOM    53  C   ILE   7    17.160   6.396  10.045  1.00  8.27        C
ATOM    54  O   ILE   7    16.441   7.359   9.782  1.00  7.21        O
ATOM    55  N   SER   8    17.856   5.735   9.129  1.00  9.16        N
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ATOM	56	CA	SER	8	17.810	6.090	7.717	1.00	9.79	C
ATOM	57	CB	SER	8	19.130	6.724	7.282	1.00	11.70	C
ATOM	58	OG	SER	8	20.183	5.779	7.348	1.00	12.51	O
ATOM	59	C	SER	8	17.576	4.805	6.931	1.00	10.40	C
ATOM	60	O	SER	8	17.203	3.777	7.502	1.00	11.46	O
ATOM	61	N	SER	9	17.796	4.856	5.623	1.00	11.68	N
ATOM	62	CA	SER	9	17.610	3.673	4.792	1.00	11.84	C
ATOM	63	CB	SER	9	17.778	4.017	3.311	1.00	11.86	C
ATOM	64	OG	SER	9	19.146	4.234	2.996	1.00	14.82	O
ATOM	65	C	SER	9	18.632	2.610	5.166	1.00	12.96	C
ATOM	66	O	SER	9	18.519	1.462	4.746	1.00	13.91	O
ATOM	67	N	TYR	10	19.632	2.993	5.955	1.00	14.18	N
ATOM	68	CA	TYR	10	20.676	2.060	6.356	1.00	16.22	C
ATOM	69	CB	TYR	10	21.898	2.826	6.879	1.00	17.96	C
ATOM	70	CG	TYR	10	23.216	2.220	6.444	1.00	19.78	C
ATOM	71	CD1	TYR	10	23.525	2.071	5.089	1.00	19.65	C
ATOM	72	CE1	TYR	10	24.732	1.497	4.682	1.00	20.05	C
ATOM	73	CD2	TYR	10	24.147	1.781	7.382	1.00	18.91	C
ATOM	74	CE2	TYR	10	25.354	1.207	6.987	1.00	20.77	C
ATOM	75	CZ	TYR	10	25.639	1.067	5.637	1.00	20.98	C
ATOM	76	OH	TYR	10	26.825	0.479	5.246	1.00	21.70	O
ATOM	77	C	TYR	10	20.203	1.045	7.396	1.00	16.32	C
ATOM	78	O	TYR	10	20.870	0.035	7.636	1.00	16.86	O
ATOM	79	N	GLN	11	19.056	1.317	8.015	1.00	15.69	N
ATOM	80	CA	GLN	11	18.476	0.413	9.007	1.00	16.34	C
ATOM	81	CB	GLN	11	18.401	1.087	10.385	1.00	15.99	C
ATOM	82	CG	GLN	11	19.754	1.427	10.998	1.00	16.59	C
ATOM	83	CD	GLN	11	20.324	2.738	10.494	1.00	18.10	C
ATOM	84	OE1	GLN	11	21.537	2.956	10.527	1.00	20.13	O
ATOM	85	NE2	GLN	11	19.451	3.626	10.038	1.00	16.18	N
ATOM	86	C	GLN	11	17.070	0.024	8.544	1.00	15.84	C
ATOM	87	O	GLN	11	16.069	0.478	9.101	1.00	16.79	O
ATOM	88	N	PRO	12	16.978	-0.831	7.515	1.00	15.57	N
ATOM	89	CD	PRO	12	18.070	-1.341	6.665	1.00	15.26	C
ATOM	90	CA	PRO	12	15.676	-1.256	6.995	1.00	14.48	C
ATOM	91	CB	PRO	12	15.996	-1.586	5.545	1.00	14.87	C
ATOM	92	CG	PRO	12	17.335	-2.247	5.681	1.00	14.84	C
ATOM	93	C	PRO	12	15.014	-2.432	7.711	1.00	15.31	C
ATOM	94	O	PRO	12	13.873	-2.772	7.401	1.00	16.50	O
ATOM	95	N	SER	13	15.718	-3.046	8.660	1.00	12.79	N
ATOM	96	CA	SER	13	15.180	-4.201	9.382	1.00	12.74	C
ATOM	97	CB	SER	13	16.013	-5.449	9.072	1.00	11.41	C
ATOM	98	OG	SER	13	16.186	-5.624	7.680	1.00	13.80	O
ATOM	99	C	SER	13	15.143	-4.009	10.892	1.00	11.88	C
ATOM	100	O	SER	13	15.393	-4.947	11.646	1.00	13.11	O
ATOM	101	N	VAL	14	14.818	-2.800	11.333	1.00	11.01	N
ATOM	102	CA	VAL	14	14.767	-2.508	12.759	1.00	10.39	C
ATOM	103	CB	VAL	14	14.456	-1.018	13.011	1.00	10.38	C
ATOM	104	CG1	VAL	14	14.317	-0.762	14.509	1.00	10.34	C
ATOM	105	CG2	VAL	14	15.560	-0.150	12.427	1.00	11.60	C
ATOM	106	C	VAL	14	13.746	-3.333	13.536	1.00	9.45	C
ATOM	107	O	VAL	14	12.615	-3.529	13.093	1.00	9.93	O
ATOM	108	N	ASN	15	14.161	-3.810	14.706	1.00	9.95	N
ATOM	109	CA	ASN	15	13.286	-4.576	15.586	1.00	9.62	C
ATOM	110	CB	ASN	15	14.118	-5.527	16.450	1.00	10.21	C
ATOM	111	CG	ASN	15	13.289	-6.255	17.491	1.00	10.27	C
ATOM	112	OD1	ASN	15	12.068	-6.100	17.557	1.00	9.99	O

ATOM	113	ND2	ASN	15	13.954	-7.055	18.317	1.00	10.67	N
ATOM	114	C	ASN	15	12.592	-3.534	16.463	1.00	9.99	C
ATOM	115	O	ASN	15	13.037	-3.253	17.576	1.00	9.83	O
ATOM	116	N	PHE	16	11.512	-2.952	15.949	1.00	8.64	N
ATOM	117	CA	PHE	16	10.775	-1.922	16.678	1.00	8.79	C
ATOM	118	CB	PHE	16	9.667	-1.350	15.794	1.00	8.79	C
ATOM	119	CG	PHE	16	10.179	-0.491	14.675	1.00	10.19	C
ATOM	120	CD1	PHE	16	10.721	0.762	14.938	1.00	9.77	C
ATOM	121	CD2	PHE	16	10.147	-0.948	13.362	1.00	10.02	C
ATOM	122	CE1	PHE	16	11.227	1.551	13.905	1.00	10.81	C
ATOM	123	CE2	PHE	16	10.649	-0.171	12.322	1.00	10.11	C
ATOM	124	CZ	PHE	16	11.190	1.081	12.592	1.00	10.28	C
ATOM	125	C	PHE	16	10.192	-2.375	18.008	1.00	8.32	C
ATOM	126	O	PHE	16	10.167	-1.608	18.970	1.00	8.78	O
ATOM	127	N	ALA	17	9.717	-3.613	18.072	1.00	8.54	N
ATOM	128	CA	ALA	17	9.161	-4.120	19.317	1.00	8.74	C
ATOM	129	CB	ALA	17	8.546	-5.494	19.097	1.00	9.51	C
ATOM	130	C	ALA	17	10.281	-4.200	20.355	1.00	9.39	C
ATOM	131	O	ALA	17	10.063	-3.951	21.544	1.00	10.06	O
ATOM	132	N	GLY	18	11.479	-4.545	19.896	1.00	8.54	N
ATOM	133	CA	GLY	18	12.613	-4.642	20.795	1.00	9.67	C
ATOM	134	C	GLY	18	13.032	-3.271	21.286	1.00	9.31	C
ATOM	135	O	GLY	18	13.310	-3.083	22.473	1.00	9.67	O
ATOM	136	N	ALA	19	13.087	-2.313	20.368	1.00	9.46	N
ATOM	137	CA	ALA	19	13.464	-0.947	20.712	1.00	9.23	C
ATOM	138	CB	ALA	19	13.468	-0.073	19.461	1.00	11.45	C
ATOM	139	C	ALA	19	12.475	-0.396	21.734	1.00	9.49	C
ATOM	140	O	ALA	19	12.867	0.294	22.679	1.00	9.44	O
ATOM	141	N	TYR	20	11.196	-0.707	21.543	1.00	8.80	N
ATOM	142	CA	TYR	20	10.149	-0.242	22.451	1.00	10.11	C
ATOM	143	CB	TYR	20	8.762	-0.616	21.917	1.00	9.65	C
ATOM	144	CG	TYR	20	7.632	0.078	22.646	1.00	11.09	C
ATOM	145	CD1	TYR	20	7.158	1.315	22.216	1.00	11.96	C
ATOM	146	CE1	TYR	20	6.145	1.979	22.907	1.00	14.21	C
ATOM	147	CD2	TYR	20	7.064	-0.485	23.790	1.00	12.69	C
ATOM	148	CE2	TYR	20	6.051	0.171	24.489	1.00	15.68	C
ATOM	149	CZ	TYR	20	5.598	1.403	24.040	1.00	15.54	C
ATOM	150	OH	TYR	20	4.605	2.063	24.728	1.00	18.43	O
ATOM	151	C	TYR	20	10.343	-0.868	23.830	1.00	12.05	C
ATOM	152	O	TYR	20	10.221	-0.195	24.855	1.00	12.17	O
ATOM	153	N	SER	21	10.644	-2.161	23.855	1.00	12.18	N
ATOM	154	CA	SER	21	10.859	-2.852	25.122	1.00	13.92	C
ATOM	155	CB	SER	21	11.101	-4.344	24.882	1.00	15.44	C
ATOM	156	OG	SER	21	10.006	-4.930	24.202	1.00	23.98	O
ATOM	157	C	SER	21	12.057	-2.252	25.849	1.00	13.09	C
ATOM	158	O	SER	21	12.082	-2.198	27.078	1.00	13.33	O
ATOM	159	N	ALA	22	13.037	-1.788	25.077	1.00	11.96	N
ATOM	160	CA	ALA	22	14.259	-1.198	25.621	1.00	11.08	C
ATOM	161	CB	ALA	22	15.366	-1.262	24.587	1.00	10.64	C
ATOM	162	C	ALA	22	14.078	0.241	26.092	1.00	10.83	C
ATOM	163	O	ALA	22	15.026	0.862	26.579	1.00	10.65	O
ATOM	164	N	GLY	23	12.874	0.779	25.924	1.00	10.20	N
ATOM	165	CA	GLY	23	12.624	2.139	26.371	1.00	10.00	C
ATOM	166	C	GLY	23	12.316	3.178	25.308	1.00	8.48	C
ATOM	167	O	GLY	23	11.797	4.242	25.631	1.00	9.46	O
ATOM	168	N	ALA	24	12.628	2.894	24.048	1.00	9.03	N
ATOM	169	CA	ALA	24	12.357	3.860	22.984	1.00	7.36	C

ATOM	170	CB	ALA	24	12.935	3.363	21.663	1.00	8.76	C
ATOM	171	C	ALA	24	10.858	4.114	22.833	1.00	7.99	C
ATOM	172	O	ALA	24	10.064	3.176	22.775	1.00	8.36	O
ATOM	173	N	ARG	25	10.474	5.385	22.761	1.00	7.43	N
ATOM	174	CA	ARG	25	9.070	5.749	22.614	1.00	5.79	C
ATOM	175	CB	ARG	25	8.584	6.490	23.863	1.00	7.90	C
ATOM	176	CG	ARG	25	8.603	5.625	25.121	1.00	8.15	C
ATOM	177	CD	ARG	25	7.530	4.543	25.053	1.00	10.21	C
ATOM	178	NE	ARG	25	7.551	3.647	26.211	1.00	10.87	N
ATOM	179	CZ	ARG	25	8.349	2.589	26.333	1.00	11.77	C
ATOM	180	NH1	ARG	25	9.201	2.278	25.366	1.00	8.76	N
ATOM	181	NH2	ARG	25	8.291	1.836	27.425	1.00	11.13	N
ATOM	182	C	ARG	25	8.838	6.598	21.367	1.00	6.61	C
ATOM	183	O	ARG	25	7.702	6.852	20.989	1.00	7.08	O
ATOM	184	N	PHE	26	9.919	7.044	20.738	1.00	6.57	N
ATOM	185	CA	PHE	26	9.801	7.826	19.514	1.00	7.33	C
ATOM	186	CB	PHE	26	9.760	9.336	19.818	1.00	7.95	C
ATOM	187	CG	PHE	26	11.073	9.915	20.279	1.00	7.82	C
ATOM	188	CD1	PHE	26	11.978	10.451	19.361	1.00	7.23	C
ATOM	189	CD2	PHE	26	11.400	9.940	21.632	1.00	8.53	C
ATOM	190	CE1	PHE	26	13.186	11.003	19.786	1.00	7.20	C
ATOM	191	CE2	PHE	26	12.605	10.490	22.068	1.00	6.92	C
ATOM	192	CZ	PHE	26	13.500	11.022	21.146	1.00	7.69	C
ATOM	193	C	PHE	26	10.955	7.496	18.582	1.00	7.81	C
ATOM	194	O	PHE	26	12.012	7.044	19.022	1.00	7.99	O
ATOM	195	N	VAL	27	10.739	7.696	17.288	1.00	7.00	N
ATOM	196	CA	VAL	27	11.777	7.428	16.305	1.00	6.65	C
ATOM	197	CB	VAL	27	11.676	5.976	15.748	1.00	6.60	C
ATOM	198	CG1	VAL	27	10.346	5.765	15.042	1.00	7.15	C
ATOM	199	CG2	VAL	27	12.841	5.695	14.802	1.00	5.74	C
ATOM	200	C	VAL	27	11.640	8.439	15.176	1.00	6.13	C
ATOM	201	O	VAL	27	10.530	8.763	14.748	1.00	8.01	O
ATOM	202	N	ILE	28	12.775	8.953	14.721	1.00	6.12	N
ATOM	203	CA	ILE	28	12.804	9.928	13.642	1.00	7.12	C
ATOM	204	CB	ILE	28	13.626	11.162	14.051	1.00	8.46	C
ATOM	205	CG2	ILE	28	13.412	12.286	13.046	1.00	9.82	C
ATOM	206	CG1	ILE	28	13.179	11.626	15.441	1.00	9.18	C
ATOM	207	CD1	ILE	28	13.977	12.787	16.000	1.00	9.17	C
ATOM	208	C	ILE	28	13.439	9.201	12.467	1.00	7.25	C
ATOM	209	O	ILE	28	14.559	8.699	12.560	1.00	8.16	O
ATOM	210	N	ILE	29	12.701	9.146	11.365	1.00	7.37	N
ATOM	211	CA	ILE	29	13.123	8.417	10.178	1.00	7.19	C
ATOM	212	CB	ILE	29	11.989	7.454	9.758	1.00	8.34	C
ATOM	213	CG2	ILE	29	12.457	6.525	8.640	1.00	7.74	C
ATOM	214	CG1	ILE	29	11.548	6.639	10.981	1.00	7.82	C
ATOM	215	CD1	ILE	29	10.238	5.908	10.813	1.00	8.28	C
ATOM	216	C	ILE	29	13.473	9.331	9.017	1.00	6.66	C
ATOM	217	O	ILE	29	12.713	10.243	8.685	1.00	6.93	O
ATOM	218	N	LYS	30	14.622	9.089	8.393	1.00	6.01	N
ATOM	219	CA	LYS	30	15.026	9.920	7.266	1.00	4.91	C
ATOM	220	CB	LYS	30	16.431	9.555	6.784	1.00	5.55	C
ATOM	221	CG	LYS	30	16.932	10.470	5.671	1.00	6.15	C
ATOM	222	CD	LYS	30	18.362	10.155	5.277	1.00	7.82	C
ATOM	223	CE	LYS	30	18.876	11.171	4.268	1.00	6.48	C
ATOM	224	NZ	LYS	30	20.318	10.946	3.951	1.00	9.42	N
ATOM	225	C	LYS	30	14.058	9.748	6.114	1.00	5.45	C
ATOM	226	O	LYS	30	13.753	8.629	5.710	1.00	5.69	O

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ATOM    227   N    ALA    31        13.579  10.862   5.578  1.00   5.51        N
ATOM    228   CA   ALA    31        12.659  10.798   4.458  1.00   5.86        C
ATOM    229   CB   ALA    31        11.450  11.692   4.721  1.00   7.02        C
ATOM    230   C    ALA    31        13.327  11.221   3.164  1.00   7.57        C
ATOM    231   O    ALA    31        13.207  10.540   2.143  1.00   8.11        O
ATOM    232   N    THR    32        14.049  12.336   3.221  1.00   6.70        N
ATOM    233   CA   THR    32        14.668  12.911   2.034  1.00   5.21        C
ATOM    234   CB   THR    32        13.725  13.981   1.449  1.00   5.97        C
ATOM    235   OG1  THR    32        13.352  14.897   2.494  1.00   7.36        O
ATOM    236   CG2  THR    32        12.459  13.342   0.898  1.00   5.98        C
ATOM    237   C    THR    32        16.018  13.589   2.268  1.00   6.60        C
ATOM    238   O    THR    32        16.422  13.819   3.401  1.00   5.84        O
ATOM    239   N    GLU    33        16.712  13.888   1.169  1.00   6.39        N
ATOM    240   CA   GLU    33        17.980  14.615   1.199  1.00   6.69        C
ATOM    241   CB   GLU    33        19.204  13.686   1.188  1.00   8.31        C
ATOM    242   CG   GLU    33        20.508  14.492   1.322  1.00   7.46        C
ATOM    243   CD   GLU    33        21.739  13.671   1.682  1.00   8.90        C
ATOM    244   OE1  GLU    33        21.612  12.606   2.326  1.00   7.90        O
ATOM    245   OE2  GLU    33        22.859  14.116   1.340  1.00   9.95        O
ATOM    246   C    GLU    33        17.980  15.485  -0.053  1.00   7.04        C
ATOM    247   O    GLU    33        17.811  14.974  -1.161  1.00   6.71        O
ATOM    248   N    GLY    34        18.171  16.791   0.122  1.00   6.34        N
ATOM    249   CA   GLY    34        18.140  17.702  -1.012  1.00   7.13        C
ATOM    250   C    GLY    34        16.817  17.486  -1.725  1.00   6.82        C
ATOM    251   O    GLY    34        15.783  17.337  -1.075  1.00   6.86        O
ATOM    252   N    THR    35        16.830  17.477  -3.055  1.00   8.51        N
ATOM    253   CA   THR    35        15.604  17.211  -3.804  1.00   9.15        C
ATOM    254   CB   THR    35        15.108  18.447  -4.602  1.00   9.43        C
ATOM    255   OG1  THR    35        16.077  18.815  -5.592  1.00  10.62        O
ATOM    256   CG2  THR    35        14.858  19.617  -3.665  1.00  10.52        C
ATOM    257   C    THR    35        15.915  16.082  -4.774  1.00  10.00        C
ATOM    258   O    THR    35        15.229  15.897  -5.776  1.00  11.29        O
ATOM    259   N    SER    36        16.947  15.310  -4.444  1.00   9.73        N
ATOM    260   CA   SER    36        17.395  14.214  -5.294  1.00  10.47        C
ATOM    261   CB   SER    36        18.861  14.437  -5.675  1.00  11.76        C
ATOM    262   OG   SER    36        19.680  14.479  -4.514  1.00  14.51        O
ATOM    263   C    SER    36        17.263  12.832  -4.671  1.00  10.78        C
ATOM    264   O    SER    36        17.359  11.825  -5.373  1.00  11.21        O
ATOM    265   N    TYR    37        17.046  12.776  -3.361  1.00   8.73        N
ATOM    266   CA   TYR    37        16.958  11.489  -2.687  1.00   8.69        C
ATOM    267   CB   TYR    37        18.248  11.231  -1.890  1.00   8.16        C
ATOM    268   CG   TYR    37        18.212   9.975  -1.037  1.00   6.97        C
ATOM    269   CD1  TYR    37        17.693   9.998   0.261  1.00   7.23        C
ATOM    270   CE1  TYR    37        17.616   8.833   1.029  1.00   8.64        C
ATOM    271   CD2  TYR    37        18.656   8.755  -1.544  1.00   6.96        C
ATOM    272   CE2  TYR    37        18.581   7.586  -0.787  1.00   7.72        C
ATOM    273   CZ   TYR    37        18.059   7.632   0.498  1.00   9.44        C
ATOM    274   OH   TYR    37        17.981   6.475   1.241  1.00  10.50        O
ATOM    275   C    TYR    37        15.762  11.302  -1.772  1.00   7.62        C
ATOM    276   O    TYR    37        15.412  12.186  -0.990  1.00   7.79        O
ATOM    277   N    THR    38        15.153  10.125  -1.885  1.00   8.57        N
ATOM    278   CA   THR    38        14.010   9.731  -1.068  1.00   9.58        C
ATOM    279   CB   THR    38        12.715   9.589  -1.911  1.00   9.82        C
ATOM    280   OG1  THR    38        12.291  10.876  -2.378  1.00  10.99        O
ATOM    281   CG2  THR    38        11.595   8.971  -1.075  1.00  10.21        C
ATOM    282   C    THR    38        14.347   8.363  -0.474  1.00   9.16        C
ATOM    283   O    THR    38        14.773   7.459  -1.193  1.00  10.62        O
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ATOM	284	N	ASN	39	14.174	8.224	0.836	1.00	8.25		N
ATOM	285	CA	ASN	39	14.430	6.962	1.530	1.00	8.50		C
ATOM	286	CB	ASN	39	14.380	7.200	3.046	1.00	8.30		C
ATOM	287	CG	ASN	39	14.446	5.917	3.856	1.00	9.26		C
ATOM	288	OD1	ASN	39	14.275	5.936	5.082	1.00	9.82		O
ATOM	289	ND2	ASN	39	14.696	4.802	3.186	1.00	6.05		N
ATOM	290	C	ASN	39	13.326	5.990	1.096	1.00	8.84		C
ATOM	291	O	ASN	39	12.167	6.150	1.474	1.00	9.63		O
ATOM	292	N	PRO	40	13.676	4.961	0.309	1.00	8.08		N
ATOM	293	CD	PRO	40	15.039	4.530	-0.057	1.00	9.47		C
ATOM	294	CA	PRO	40	12.683	3.991	-0.161	1.00	10.07		C
ATOM	295	CB	PRO	40	13.485	3.138	-1.139	1.00	9.05		C
ATOM	296	CG	PRO	40	14.820	3.087	-0.485	1.00	8.73		C
ATOM	297	C	PRO	40	12.025	3.158	0.937	1.00	9.82		C
ATOM	298	O	PRO	40	10.937	2.611	0.738	1.00	12.01		O
ATOM	299	N	SER	41	12.679	3.069	2.092	1.00	8.74		N
ATOM	300	CA	SER	41	12.156	2.295	3.218	1.00	8.27		C
ATOM	301	CB	SER	41	13.302	1.634	3.988	1.00	9.74		C
ATOM	302	OG	SER	41	13.998	0.696	3.190	1.00	9.72		O
ATOM	303	C	SER	41	11.338	3.122	4.204	1.00	7.97		C
ATOM	304	O	SER	41	10.798	2.577	5.163	1.00	8.37		O
ATOM	305	N	PHE	42	11.243	4.426	3.967	1.00	8.58		N
ATOM	306	CA	PHE	42	10.508	5.321	4.865	1.00	8.69		C
ATOM	307	CB	PHE	42	10.358	6.709	4.231	1.00	9.12		C
ATOM	308	CG	PHE	42	9.671	7.712	5.122	1.00	6.49		C
ATOM	309	CD1	PHE	42	10.380	8.379	6.114	1.00	8.17		C
ATOM	310	CD2	PHE	42	8.308	7.957	4.994	1.00	8.56		C
ATOM	311	CE1	PHE	42	9.745	9.275	6.968	1.00	7.24		C
ATOM	312	CE2	PHE	42	7.662	8.852	5.847	1.00	7.58		C
ATOM	313	CZ	PHE	42	8.387	9.511	6.837	1.00	7.24		C
ATOM	314	C	PHE	42	9.124	4.818	5.269	1.00	9.05		C
ATOM	315	O	PHE	42	8.810	4.717	6.452	1.00	8.75		O
ATOM	316	N	SER	43	8.292	4.511	4.282	1.00	8.85		N
ATOM	317	CA	SER	43	6.938	4.054	4.557	1.00	10.47		C
ATOM	318	CB	SER	43	6.180	3.865	3.240	1.00	13.93		C
ATOM	319	OG	SER	43	4.781	3.929	3.449	1.00	16.87		O
ATOM	320	C	SER	43	6.908	2.766	5.384	1.00	10.00		C
ATOM	321	O	SER	43	6.096	2.629	6.298	1.00	10.48		O
ATOM	322	N	SER	44	7.793	1.823	5.074	1.00	10.21		N
ATOM	323	CA	SER	44	7.834	0.571	5.824	1.00	10.40		C
ATOM	324	CB	SER	44	8.789	-0.426	5.164	1.00	12.47		C
ATOM	325	OG	SER	44	8.198	-1.016	4.020	1.00	16.87		O
ATOM	326	C	SER	44	8.275	0.821	7.260	1.00	9.36		C
ATOM	327	O	SER	44	7.710	0.266	8.200	1.00	8.73		O
ATOM	328	N	GLN	45	9.294	1.657	7.417	1.00	9.07		N
ATOM	329	CA	GLN	45	9.824	1.993	8.732	1.00	8.42		C
ATOM	330	CB	GLN	45	11.107	2.808	8.571	1.00	8.03		C
ATOM	331	CG	GLN	45	12.287	1.982	8.078	1.00	8.53		C
ATOM	332	CD	GLN	45	13.479	2.828	7.655	1.00	9.48		C
ATOM	333	OE1	GLN	45	14.631	2.462	7.900	1.00	12.85		O
ATOM	334	NE2	GLN	45	13.210	3.951	7.004	1.00	6.48		N
ATOM	335	C	GLN	45	8.799	2.776	9.548	1.00	8.68		C
ATOM	336	O	GLN	45	8.651	2.564	10.752	1.00	8.83		O
ATOM	337	N	TYR	46	8.094	3.677	8.874	1.00	8.08		N
ATOM	338	CA	TYR	46	7.064	4.510	9.491	1.00	8.71		C
ATOM	339	CB	TYR	46	6.508	5.465	8.436	1.00	9.25		C
ATOM	340	CG	TYR	46	5.890	6.741	8.954	1.00	10.78		C

ATOM	341	CD1	TYR	46	6.679	7.846	9.260	1.00	10.67	C
ATOM	342	CE1	TYR	46	6.105	9.052	9.658	1.00	12.47	C
ATOM	343	CD2	TYR	46	4.508	6.866	9.069	1.00	12.98	C
ATOM	344	CE2	TYR	46	3.925	8.064	9.467	1.00	13.66	C
ATOM	345	CZ	TYR	46	4.729	9.151	9.755	1.00	12.68	C
ATOM	346	OH	TYR	46	4.155	10.347	10.120	1.00	17.79	O
ATOM	347	C	TYR	46	5.933	3.629	10.030	1.00	8.58	C
ATOM	348	O	TYR	46	5.480	3.796	11.162	1.00	8.24	O
ATOM	349	N	THR	47	5.468	2.699	9.203	1.00	8.84	N
ATOM	350	CA	THR	47	4.392	1.794	9.590	1.00	9.10	C
ATOM	351	CB	THR	47	3.838	1.053	8.357	1.00	10.51	C
ATOM	352	OG1	THR	47	3.144	1.989	7.523	1.00	11.47	O
ATOM	353	CG2	THR	47	2.875	-0.055	8.771	1.00	11.55	C
ATOM	354	C	THR	47	4.849	0.787	10.644	1.00	8.42	C
ATOM	355	O	THR	47	4.102	0.466	11.571	1.00	9.18	O
ATOM	356	N	GLY	48	6.074	0.291	10.507	1.00	7.72	N
ATOM	357	CA	GLY	48	6.588	-0.653	11.481	1.00	8.01	C
ATOM	358	C	GLY	48	6.633	0.013	12.842	1.00	8.40	C
ATOM	359	O	GLY	48	6.291	-0.596	13.859	1.00	8.51	O
ATOM	360	N	ALA	49	7.059	1.272	12.864	1.00	7.95	N
ATOM	361	CA	ALA	49	7.132	2.023	14.110	1.00	8.17	C
ATOM	362	CB	ALA	49	7.837	3.358	13.880	1.00	6.95	C
ATOM	363	C	ALA	49	5.724	2.253	14.655	1.00	9.10	C
ATOM	364	O	ALA	49	5.477	2.079	15.849	1.00	8.36	O
ATOM	365	N	THR	50	4.802	2.636	13.778	1.00	9.06	N
ATOM	366	CA	THR	50	3.420	2.879	14.186	1.00	10.45	C
ATOM	367	CB	THR	50	2.531	3.259	12.979	1.00	11.49	C
ATOM	368	OG1	THR	50	3.026	4.459	12.372	1.00	9.53	O
ATOM	369	CG2	THR	50	1.091	3.483	13.428	1.00	12.72	C
ATOM	370	C	THR	50	2.830	1.628	14.836	1.00	11.92	C
ATOM	371	O	THR	50	2.232	1.689	15.912	1.00	11.14	O
ATOM	372	N	ASN	51	3.007	0.490	14.177	1.00	11.86	N
ATOM	373	CA	ASN	51	2.484	-0.774	14.679	1.00	11.72	C
ATOM	374	CB	ASN	51	2.711	-1.880	13.645	1.00	13.13	C
ATOM	375	CG	ASN	51	1.860	-1.703	12.403	1.00	14.08	C
ATOM	376	OD1	ASN	51	2.073	-2.374	11.393	1.00	18.26	O
ATOM	377	ND2	ASN	51	0.887	-0.806	12.473	1.00	14.53	N
ATOM	378	C	ASN	51	3.092	-1.194	16.016	1.00	11.76	C
ATOM	379	O	ASN	51	2.490	-1.977	16.751	1.00	12.69	O
ATOM	380	N	ALA	52	4.280	-0.682	16.327	1.00	11.54	N
ATOM	381	CA	ALA	52	4.952	-1.022	17.578	1.00	11.12	C
ATOM	382	CB	ALA	52	6.463	-1.056	17.373	1.00	12.74	C
ATOM	383	C	ALA	52	4.595	-0.068	18.720	1.00	11.19	C
ATOM	384	O	ALA	52	5.056	-0.247	19.846	1.00	12.30	O
ATOM	385	N	GLY	53	3.779	0.940	18.419	1.00	11.42	N
ATOM	386	CA	GLY	53	3.351	1.894	19.432	1.00	10.55	C
ATOM	387	C	GLY	53	4.175	3.163	19.528	1.00	11.00	C
ATOM	388	O	GLY	53	4.055	3.927	20.489	1.00	10.31	O
ATOM	389	N	PHE	54	5.004	3.401	18.521	1.00	9.51	N
ATOM	390	CA	PHE	54	5.870	4.573	18.501	1.00	8.92	C
ATOM	391	CB	PHE	54	7.060	4.331	17.570	1.00	7.08	C
ATOM	392	CG	PHE	54	8.157	3.521	18.175	1.00	6.82	C
ATOM	393	CD1	PHE	54	9.196	4.140	18.854	1.00	9.29	C
ATOM	394	CD2	PHE	54	8.149	2.137	18.074	1.00	7.65	C
ATOM	395	CE1	PHE	54	10.216	3.391	19.425	1.00	9.10	C
ATOM	396	CE2	PHE	54	9.165	1.378	18.643	1.00	9.26	C
ATOM	397	CZ	PHE	54	10.200	2.007	19.319	1.00	9.73	C

ATOM	398	C	PHE	54	5.247	5.879	18.054	1.00	8.46	C
ATOM	399	O	PHE	54	4.267	5.910	17.311	1.00	9.23	O
ATOM	400	N	ILE	55	5.850	6.963	18.527	1.00	9.28	N
ATOM	401	CA	ILE	55	5.491	8.304	18.104	1.00	9.25	C
ATOM	402	CB	ILE	55	5.724	9.341	19.223	1.00	9.84	C
ATOM	403	CG2	ILE	55	5.794	10.748	18.634	1.00	11.09	C
ATOM	404	CG1	ILE	55	4.598	9.238	20.253	1.00	11.19	C
ATOM	405	CD1	ILE	55	4.696	10.241	21.383	1.00	10.90	C
ATOM	406	C	ILE	55	6.582	8.419	17.043	1.00	8.89	C
ATOM	407	O	ILE	55	7.720	8.024	17.297	1.00	10.29	O
ATOM	408	N	ARG	56	6.258	8.916	15.856	1.00	8.71	N
ATOM	409	CA	ARG	56	7.273	8.991	14.813	1.00	8.19	C
ATOM	410	CB	ARG	56	7.210	7.735	13.929	1.00	7.43	C
ATOM	411	CG	ARG	56	5.940	7.599	13.093	1.00	8.44	C
ATOM	412	CD	ARG	56	4.740	7.114	13.906	1.00	10.51	C
ATOM	413	NE	ARG	56	3.523	7.057	13.098	1.00	11.35	N
ATOM	414	CZ	ARG	56	2.837	8.124	12.694	1.00	11.22	C
ATOM	415	NH1	ARG	56	3.241	9.344	13.022	1.00	12.10	N
ATOM	416	NH2	ARG	56	1.744	7.974	11.957	1.00	15.01	N
ATOM	417	C	ARG	56	7.176	10.224	13.933	1.00	7.81	C
ATOM	418	O	ARG	56	6.131	10.870	13.846	1.00	8.34	O
ATOM	419	N	GLY	57	8.286	10.535	13.275	1.00	8.27	N
ATOM	420	CA	GLY	57	8.334	11.679	12.389	1.00	7.56	C
ATOM	421	C	GLY	57	9.450	11.468	11.390	1.00	7.55	C
ATOM	422	O	GLY	57	10.196	10.499	11.492	1.00	7.64	O
ATOM	423	N	GLY	58	9.566	12.363	10.419	1.00	5.75	N
ATOM	424	CA	GLY	58	10.619	12.215	9.436	1.00	5.81	C
ATOM	425	C	GLY	58	11.651	13.319	9.526	1.00	6.69	C
ATOM	426	O	GLY	58	11.456	14.313	10.232	1.00	6.27	O
ATOM	427	N	TYR	59	12.773	13.139	8.843	1.00	4.76	N
ATOM	428	CA	TYR	59	13.778	14.182	8.832	1.00	4.95	C
ATOM	429	CB	TYR	59	14.884	13.925	9.876	1.00	5.22	C
ATOM	430	CG	TYR	59	15.947	12.886	9.569	1.00	5.71	C
ATOM	431	CD1	TYR	59	17.008	13.169	8.705	1.00	7.70	C
ATOM	432	CE1	TYR	59	18.053	12.261	8.525	1.00	8.96	C
ATOM	433	CD2	TYR	59	15.953	11.662	10.235	1.00	6.19	C
ATOM	434	CE2	TYR	59	16.995	10.750	10.061	1.00	7.74	C
ATOM	435	CZ	TYR	59	18.038	11.059	9.209	1.00	8.92	C
ATOM	436	OH	TYR	59	19.077	10.168	9.053	1.00	9.78	O
ATOM	437	C	TYR	59	14.333	14.377	7.434	1.00	5.39	C
ATOM	438	O	TYR	59	14.303	13.468	6.602	1.00	5.69	O
ATOM	439	N	HIS	60	14.798	15.591	7.178	1.00	4.73	N
ATOM	440	CA	HIS	60	15.333	15.966	5.878	1.00	3.87	C
ATOM	441	CB	HIS	60	14.525	17.140	5.320	1.00	5.10	C
ATOM	442	CG	HIS	60	15.076	17.703	4.049	1.00	4.80	C
ATOM	443	CD2	HIS	60	15.802	18.820	3.811	1.00	4.41	C
ATOM	444	ND1	HIS	60	14.927	17.074	2.831	1.00	4.92	N
ATOM	445	CE1	HIS	60	15.540	17.779	1.898	1.00	5.58	C
ATOM	446	NE2	HIS	60	16.081	18.843	2.466	1.00	5.65	N
ATOM	447	C	HIS	60	16.788	16.388	5.986	1.00	5.76	C
ATOM	448	O	HIS	60	17.126	17.225	6.819	1.00	6.77	O
ATOM	449	N	PHE	61	17.651	15.816	5.152	1.00	7.02	N
ATOM	450	CA	PHE	61	19.049	16.222	5.179	1.00	6.49	C
ATOM	451	CB	PHE	61	19.981	15.075	4.792	1.00	7.50	C
ATOM	452	CG	PHE	61	21.431	15.390	5.032	1.00	7.19	C
ATOM	453	CD1	PHE	61	22.128	16.229	4.168	1.00	10.31	C
ATOM	454	CD2	PHE	61	22.078	14.907	6.164	1.00	9.26	C

ATOM	455	CE1	PHE	61	23.450	16.587	4.430	1.00	9.39	C
ATOM	456	CE2	PHE	61	23.399	15.259	6.436	1.00	9.89	C
ATOM	457	CZ	PHE	61	24.085	16.101	5.568	1.00	8.65	C
ATOM	458	C	PHE	61	19.176	17.374	4.191	1.00	6.75	C
ATOM	459	O	PHE	61	19.021	17.201	2.981	1.00	6.40	O
ATOM	460	N	ALA	62	19.465	18.553	4.725	1.00	6.47	N
ATOM	461	CA	ALA	62	19.560	19.768	3.930	1.00	6.66	C
ATOM	462	CB	ALA	62	19.427	20.973	4.850	1.00	6.54	C
ATOM	463	C	ALA	62	20.782	19.965	3.042	1.00	7.30	C
ATOM	464	O	ALA	62	21.884	19.521	3.358	1.00	8.54	O
ATOM	465	N	HIS	63	20.546	20.651	1.929	1.00	8.11	N
ATOM	466	CA	HIS	63	21.578	21.038	0.972	1.00	7.45	C
ATOM	467	CB	HIS	63	21.658	20.059	-0.194	1.00	8.69	C
ATOM	468	CG	HIS	63	22.462	18.843	0.125	1.00	10.41	C
ATOM	469	CD2	HIS	63	23.767	18.708	0.459	1.00	9.21	C
ATOM	470	ND1	HIS	63	21.910	17.585	0.213	1.00	10.58	N
ATOM	471	CE1	HIS	63	22.840	16.727	0.590	1.00	7.72	C
ATOM	472	NE2	HIS	63	23.975	17.383	0.746	1.00	13.09	N
ATOM	473	C	HIS	63	21.160	22.423	0.512	1.00	7.37	C
ATOM	474	O	HIS	63	20.595	22.603	-0.563	1.00	6.78	O
ATOM	475	N	PRO	64	21.424	23.431	1.355	1.00	8.82	N
ATOM	476	CD	PRO	64	22.068	23.272	2.672	1.00	8.42	C
ATOM	477	CA	PRO	64	21.094	24.837	1.112	1.00	7.12	C
ATOM	478	CB	PRO	64	21.709	25.541	2.318	1.00	9.10	C
ATOM	479	CG	PRO	64	21.587	24.504	3.399	1.00	8.24	C
ATOM	480	C	PRO	64	21.558	25.435	-0.211	1.00	8.46	C
ATOM	481	O	PRO	64	20.961	26.393	-0.702	1.00	9.11	O
ATOM	482	N	GLY	65	22.613	24.876	-0.792	1.00	8.66	N
ATOM	483	CA	GLY	65	23.104	25.415	-2.049	1.00	10.02	C
ATOM	484	C	GLY	65	22.500	24.772	-3.281	1.00	11.41	C
ATOM	485	O	GLY	65	22.830	25.151	-4.405	1.00	11.47	O
ATOM	486	N	GLU	66	21.601	23.817	-3.073	1.00	9.50	N
ATOM	487	CA	GLU	66	20.968	23.094	-4.172	1.00	9.05	C
ATOM	488	CB	GLU	66	20.666	21.666	-3.735	1.00	8.93	C
ATOM	489	CG	GLU	66	20.126	20.776	-4.840	1.00	9.85	C
ATOM	490	CD	GLU	66	19.514	19.506	-4.302	1.00	13.05	C
ATOM	491	OE1	GLU	66	19.930	19.068	-3.212	1.00	17.78	O
ATOM	492	OE2	GLU	66	18.622	18.940	-4.968	1.00	15.99	O
ATOM	493	C	GLU	66	19.686	23.735	-4.692	1.00	8.98	C
ATOM	494	O	GLU	66	19.494	23.857	-5.905	1.00	9.83	O
ATOM	495	N	THR	67	18.801	24.117	-3.775	1.00	8.21	N
ATOM	496	CA	THR	67	17.529	24.748	-4.126	1.00	7.57	C
ATOM	497	CB	THR	67	16.365	23.734	-4.166	1.00	7.86	C
ATOM	498	OG1	THR	67	16.051	23.325	-2.828	1.00	6.94	O
ATOM	499	CG2	THR	67	16.737	22.514	-4.984	1.00	8.03	C
ATOM	500	C	THR	67	17.192	25.740	-3.022	1.00	8.34	C
ATOM	501	O	THR	67	17.955	25.888	-2.071	1.00	8.40	O
ATOM	502	N	THR	68	16.055	26.419	-3.141	1.00	9.09	N
ATOM	503	CA	THR	68	15.651	27.351	-2.094	1.00	7.99	C
ATOM	504	CB	THR	68	14.510	28.289	-2.550	1.00	8.25	C
ATOM	505	OG1	THR	68	13.353	27.516	-2.894	1.00	11.29	O
ATOM	506	CG2	THR	68	14.948	29.114	-3.748	1.00	8.80	C
ATOM	507	C	THR	68	15.151	26.513	-0.923	1.00	7.71	C
ATOM	508	O	THR	68	14.905	25.316	-1.073	1.00	7.64	O
ATOM	509	N	GLY	69	15.004	27.140	0.239	1.00	6.90	N
ATOM	510	CA	GLY	69	14.536	26.421	1.411	1.00	6.89	C
ATOM	511	C	GLY	69	13.132	25.853	1.281	1.00	6.21	C

ATOM	512	O	GLY	69	12.888	24.710	1.668	1.00	6.24	O
ATOM	513	N	ALA	70	12.207	26.641	0.739	1.00	5.59	N
ATOM	514	CA	ALA	70	10.825	26.187	0.581	1.00	5.03	C
ATOM	515	CB	ALA	70	9.956	27.324	0.043	1.00	5.32	C
ATOM	516	C	ALA	70	10.736	24.979	-0.344	1.00	5.43	C
ATOM	517	O	ALA	70	9.910	24.087	-0.144	1.00	6.65	O
ATOM	518	N	ALA	71	11.593	24.946	-1.356	1.00	6.49	N
ATOM	519	CA	ALA	71	11.595	23.835	-2.297	1.00	6.38	C
ATOM	520	CB	ALA	71	12.614	24.089	-3.404	1.00	8.65	C
ATOM	521	C	ALA	71	11.897	22.519	-1.587	1.00	6.73	C
ATOM	522	O	ALA	71	11.240	21.508	-1.837	1.00	8.00	O
ATOM	523	N	GLN	72	12.888	22.517	-0.697	1.00	6.00	N
ATOM	524	CA	GLN	72	13.215	21.289	0.009	1.00	5.93	C
ATOM	525	CB	GLN	72	14.633	21.364	0.594	1.00	6.73	C
ATOM	526	CG	GLN	72	15.676	20.971	-0.454	1.00	5.02	C
ATOM	527	CD	GLN	72	17.111	21.211	-0.029	1.00	7.05	C
ATOM	528	OE1	GLN	72	17.585	20.660	0.964	1.00	5.95	O
ATOM	529	NE2	GLN	72	17.817	22.031	-0.799	1.00	5.60	N
ATOM	530	C	GLN	72	12.181	20.932	1.069	1.00	6.75	C
ATOM	531	O	GLN	72	12.020	19.766	1.408	1.00	6.46	O
ATOM	532	N	ALA	73	11.470	21.930	1.582	1.00	7.28	N
ATOM	533	CA	ALA	73	10.429	21.666	2.566	1.00	4.95	C
ATOM	534	CB	ALA	73	9.917	22.973	3.170	1.00	5.31	C
ATOM	535	C	ALA	73	9.294	20.942	1.844	1.00	5.65	C
ATOM	536	O	ALA	73	8.723	19.988	2.365	1.00	7.03	O
ATOM	537	N	ASP	74	8.977	21.396	0.635	1.00	6.45	N
ATOM	538	CA	ASP	74	7.912	20.771	-0.143	1.00	7.36	C
ATOM	539	CB	ASP	74	7.562	21.635	-1.359	1.00	8.27	C
ATOM	540	CG	ASP	74	6.628	22.780	-1.009	1.00	11.97	C
ATOM	541	OD1	ASP	74	6.256	23.554	-1.916	1.00	12.31	O
ATOM	542	OD2	ASP	74	6.256	22.902	0.176	1.00	12.24	O
ATOM	543	C	ASP	74	8.286	19.359	-0.586	1.00	6.27	C
ATOM	544	O	ASP	74	7.439	18.465	-0.599	1.00	7.46	O
ATOM	545	N	TYR	75	9.555	19.155	-0.937	1.00	7.24	N
ATOM	546	CA	TYR	75	10.031	17.841	-1.364	1.00	6.51	C
ATOM	547	CB	TYR	75	11.478	17.947	-1.863	1.00	6.12	C
ATOM	548	CG	TYR	75	12.046	16.662	-2.427	1.00	6.64	C
ATOM	549	CD1	TYR	75	11.679	16.210	-3.694	1.00	8.95	C
ATOM	550	CE1	TYR	75	12.196	15.021	-4.213	1.00	7.83	C
ATOM	551	CD2	TYR	75	12.945	15.893	-1.686	1.00	6.44	C
ATOM	552	CE2	TYR	75	13.466	14.706	-2.193	1.00	8.14	C
ATOM	553	CZ	TYR	75	13.089	14.276	-3.455	1.00	8.46	C
ATOM	554	OH	TYR	75	13.606	13.103	-3.957	1.00	9.61	O
ATOM	555	C	TYR	75	9.953	16.900	-0.161	1.00	6.52	C
ATOM	556	O	TYR	75	9.495	15.765	-0.267	1.00	6.89	O
ATOM	557	N	PHE	76	10.406	17.398	0.984	1.00	5.93	N
ATOM	558	CA	PHE	76	10.392	16.656	2.241	1.00	4.80	C
ATOM	559	CB	PHE	76	10.963	17.569	3.339	1.00	5.81	C
ATOM	560	CG	PHE	76	10.882	17.009	4.734	1.00	5.71	C
ATOM	561	CD1	PHE	76	11.289	15.709	5.013	1.00	5.07	C
ATOM	562	CD2	PHE	76	10.476	17.824	5.789	1.00	5.83	C
ATOM	563	CE1	PHE	76	11.301	15.230	6.323	1.00	4.57	C
ATOM	564	CE2	PHE	76	10.485	17.354	7.102	1.00	5.04	C
ATOM	565	CZ	PHE	76	10.900	16.057	7.369	1.00	5.04	C
ATOM	566	C	PHE	76	8.960	16.227	2.565	1.00	5.94	C
ATOM	567	O	PHE	76	8.693	15.057	2.845	1.00	5.63	O
ATOM	568	N	ILE	77	8.039	17.180	2.513	1.00	6.32	N

ATOM	569	CA	ILE	77	6.639	16.899	2.806	1.00	7.12	C
ATOM	570	CB	ILE	77	5.827	18.211	2.870	1.00	8.11	C
ATOM	571	CG2	ILE	77	4.336	17.904	2.953	1.00	6.94	C
ATOM	572	CG1	ILE	77	6.291	19.034	4.077	1.00	8.24	C
ATOM	573	CD1	ILE	77	5.641	20.398	4.191	1.00	9.46	C
ATOM	574	C	ILE	77	6.024	15.956	1.774	1.00	7.54	C
ATOM	575	O	ILE	77	5.298	15.025	2.130	1.00	7.68	O
ATOM	576	N	ALA	78	6.330	16.186	0.501	1.00	8.57	N
ATOM	577	CA	ALA	78	5.797	15.357	-0.578	1.00	8.18	C
ATOM	578	CB	ALA	78	6.227	15.914	-1.934	1.00	8.09	C
ATOM	579	C	ALA	78	6.244	13.909	-0.450	1.00	7.94	C
ATOM	580	O	ALA	78	5.660	13.011	-1.061	1.00	7.27	O
ATOM	581	N	HIS	79	7.283	13.676	0.343	1.00	8.20	N
ATOM	582	CA	HIS	79	7.766	12.322	0.510	1.00	9.93	C
ATOM	583	CB	HIS	79	9.183	12.194	-0.055	1.00	11.38	C
ATOM	584	CG	HIS	79	9.230	12.305	-1.548	1.00	12.92	C
ATOM	585	CD2	HIS	79	8.964	11.394	-2.514	1.00	13.07	C
ATOM	586	ND1	HIS	79	9.471	13.494	-2.202	1.00	13.07	N
ATOM	587	CE1	HIS	79	9.348	13.312	-3.505	1.00	12.53	C
ATOM	588	NE2	HIS	79	9.039	12.046	-3.721	1.00	14.70	N
ATOM	589	C	HIS	79	7.672	11.776	1.925	1.00	10.51	C
ATOM	590	O	HIS	79	8.514	10.992	2.361	1.00	9.18	O
ATOM	591	N	GLY	80	6.628	12.202	2.633	1.00	9.96	N
ATOM	592	CA	GLY	80	6.370	11.698	3.969	1.00	10.32	C
ATOM	593	C	GLY	80	6.741	12.503	5.196	1.00	10.41	C
ATOM	594	O	GLY	80	6.352	12.126	6.299	1.00	10.19	O
ATOM	595	N	GLY	81	7.459	13.607	5.019	1.00	8.95	N
ATOM	596	CA	GLY	81	7.893	14.398	6.160	1.00	8.24	C
ATOM	597	C	GLY	81	6.948	15.422	6.762	1.00	8.47	C
ATOM	598	O	GLY	81	7.366	16.221	7.598	1.00	7.89	O
ATOM	599	N	GLY	82	5.683	15.404	6.359	1.00	8.28	N
ATOM	600	CA	GLY	82	4.733	16.364	6.894	1.00	7.99	C
ATOM	601	C	GLY	82	4.262	16.034	8.297	1.00	7.57	C
ATOM	602	O	GLY	82	4.883	15.240	9.005	1.00	8.28	O
ATOM	603	N	TRP	83	3.153	16.642	8.701	1.00	6.08	N
ATOM	604	CA	TRP	83	2.606	16.409	10.028	1.00	6.77	C
ATOM	605	CB	TRP	83	2.975	17.562	10.963	1.00	7.46	C
ATOM	606	CG	TRP	83	2.438	17.391	12.354	1.00	7.23	C
ATOM	607	CD2	TRP	83	1.229	17.953	12.881	1.00	6.93	C
ATOM	608	CE2	TRP	83	1.102	17.498	14.211	1.00	7.13	C
ATOM	609	CE3	TRP	83	0.238	18.797	12.356	1.00	6.36	C
ATOM	610	CD1	TRP	83	2.980	16.640	13.358	1.00	7.84	C
ATOM	611	NE1	TRP	83	2.183	16.698	14.478	1.00	6.25	N
ATOM	612	CZ2	TRP	83	0.025	17.860	15.027	1.00	7.90	C
ATOM	613	CZ3	TRP	83	-0.833	19.156	13.168	1.00	7.34	C
ATOM	614	CH2	TRP	83	-0.930	18.687	14.487	1.00	7.16	C
ATOM	615	C	TRP	83	1.095	16.281	9.976	1.00	7.95	C
ATOM	616	O	TRP	83	0.433	16.944	9.178	1.00	7.60	O
ATOM	617	N	SER	84	0.563	15.422	10.838	1.00	9.28	N
ATOM	618	CA	SER	84	-0.872	15.193	10.937	1.00	11.07	C
ATOM	619	CB	SER	84	-1.263	13.888	10.241	1.00	13.28	C
ATOM	620	OG	SER	84	-0.977	13.944	8.854	1.00	15.40	O
ATOM	621	C	SER	84	-1.218	15.103	12.414	1.00	12.06	C
ATOM	622	O	SER	84	-0.404	14.656	13.223	1.00	10.56	O
ATOM	623	N	GLY	85	-2.427	15.527	12.763	1.00	12.52	N
ATOM	624	CA	GLY	85	-2.840	15.484	14.151	1.00	13.93	C
ATOM	625	C	GLY	85	-3.353	14.121	14.580	1.00	16.15	C

ATOM	626	O	GLY	85	-4.454	14.015	15.121	1.00	15.75	O
ATOM	627	N	ASP	86	-2.565	13.077	14.337	1.00	17.09	N
ATOM	628	CA	ASP	86	-2.967	11.728	14.724	1.00	17.78	C
ATOM	629	CB	ASP	86	-2.507	10.695	13.690	1.00	16.99	C
ATOM	630	CG	ASP	86	-1.025	10.781	13.395	1.00	18.11	C
ATOM	631	OD1	ASP	86	-0.268	11.262	14.263	1.00	16.73	O
ATOM	632	OD2	ASP	86	-0.616	10.354	12.294	1.00	20.62	O
ATOM	633	C	ASP	86	-2.401	11.371	16.093	1.00	17.84	C
ATOM	634	O	ASP	86	-2.412	10.207	16.498	1.00	20.58	O
ATOM	635	N	GLY	87	-1.900	12.383	16.794	1.00	15.96	N
ATOM	636	CA	GLY	87	-1.353	12.183	18.124	1.00	14.67	C
ATOM	637	C	GLY	87	-0.016	11.476	18.230	1.00	14.32	C
ATOM	638	O	GLY	87	0.565	11.411	19.315	1.00	14.97	O
ATOM	639	N	ILE	88	0.489	10.954	17.118	1.00	12.99	N
ATOM	640	CA	ILE	88	1.760	10.245	17.149	1.00	13.26	C
ATOM	641	CB	ILE	88	1.541	8.732	16.949	1.00	13.42	C
ATOM	642	CG2	ILE	88	0.716	8.177	18.102	1.00	14.70	C
ATOM	643	CG1	ILE	88	0.831	8.480	15.617	1.00	14.63	C
ATOM	644	CD1	ILE	88	0.638	7.013	15.286	1.00	13.44	C
ATOM	645	C	ILE	88	2.783	10.723	16.124	1.00	11.67	C
ATOM	646	O	ILE	88	3.773	10.037	15.876	1.00	12.00	O
ATOM	647	N	THR	89	2.554	11.894	15.537	1.00	10.59	N
ATOM	648	CA	THR	89	3.481	12.426	14.541	1.00	8.81	C
ATOM	649	CB	THR	89	2.740	12.910	13.277	1.00	8.73	C
ATOM	650	OG1	THR	89	1.852	11.884	12.817	1.00	9.98	O
ATOM	651	CG2	THR	89	3.741	13.243	12.168	1.00	7.65	C
ATOM	652	C	THR	89	4.291	13.598	15.081	1.00	8.34	C
ATOM	653	O	THR	89	3.731	14.572	15.579	1.00	7.31	O
ATOM	654	N	LEU	90	5.614	13.498	14.988	1.00	7.25	N
ATOM	655	CA	LEU	90	6.477	14.581	15.441	1.00	6.98	C
ATOM	656	CB	LEU	90	7.869	14.052	15.799	1.00	8.49	C
ATOM	657	CG	LEU	90	8.019	13.111	16.992	1.00	10.26	C
ATOM	658	CD1	LEU	90	9.444	12.565	17.025	1.00	10.26	C
ATOM	659	CD2	LEU	90	7.690	13.858	18.274	1.00	13.39	C
ATOM	660	C	LEU	90	6.630	15.578	14.302	1.00	6.60	C
ATOM	661	O	LEU	90	6.520	15.209	13.131	1.00	7.23	O
ATOM	662	N	PRO	91	6.846	16.861	14.627	1.00	6.56	N
ATOM	663	CD	PRO	91	6.766	17.526	15.940	1.00	7.77	C
ATOM	664	CA	PRO	91	7.019	17.842	13.552	1.00	5.57	C
ATOM	665	CB	PRO	91	7.280	19.139	14.307	1.00	6.11	C
ATOM	666	CG	PRO	91	6.482	18.961	15.556	1.00	7.52	C
ATOM	667	C	PRO	91	8.263	17.388	12.796	1.00	5.97	C
ATOM	668	O	PRO	91	9.201	16.878	13.413	1.00	6.65	O
ATOM	669	N	GLY	92	8.278	17.566	11.481	1.00	5.46	N
ATOM	670	CA	GLY	92	9.442	17.157	10.713	1.00	5.27	C
ATOM	671	C	GLY	92	10.717	17.802	11.222	1.00	5.76	C
ATOM	672	O	GLY	92	10.695	18.917	11.743	1.00	6.51	O
ATOM	673	N	MET	93	11.838	17.106	11.064	1.00	4.30	N
ATOM	674	CA	MET	93	13.121	17.622	11.523	1.00	6.12	C
ATOM	675	CB	MET	93	13.789	16.595	12.441	1.00	7.34	C
ATOM	676	CG	MET	93	15.139	17.016	12.993	1.00	7.89	C
ATOM	677	SD	MET	93	15.777	15.817	14.194	1.00	8.44	S
ATOM	678	CE	MET	93	16.645	14.672	13.121	1.00	9.69	C
ATOM	679	C	MET	93	14.041	17.947	10.351	1.00	6.13	C
ATOM	680	O	MET	93	14.210	17.137	9.438	1.00	6.89	O
ATOM	681	N	LEU	94	14.629	19.140	10.386	1.00	6.07	N
ATOM	682	CA	LEU	94	15.552	19.584	9.347	1.00	6.03	C

ATOM	683	CB	LEU	94	15.321	21.066	9.037	1.00	6.52	C
ATOM	684	CG	LEU	94	16.293	21.744	8.065	1.00	5.27	C
ATOM	685	CD1	LEU	94	16.242	21.063	6.696	1.00	4.07	C
ATOM	686	CD2	LEU	94	15.931	23.222	7.957	1.00	5.83	C
ATOM	687	C	LEU	94	16.979	19.359	9.840	1.00	7.31	C
ATOM	688	O	LEU	94	17.422	19.986	10.805	1.00	6.76	O
ATOM	689	N	ASP	95	17.683	18.455	9.162	1.00	6.54	N
ATOM	690	CA	ASP	95	19.055	18.074	9.490	1.00	8.60	C
ATOM	691	CB	ASP	95	19.305	16.650	8.976	1.00	11.71	C
ATOM	692	CG	ASP	95	20.591	16.048	9.498	1.00	16.69	C
ATOM	693	OD1	ASP	95	21.584	16.787	9.635	1.00	17.38	O
ATOM	694	OD2	ASP	95	20.611	14.824	9.756	1.00	19.57	O
ATOM	695	C	ASP	95	20.068	19.039	8.868	1.00	6.83	C
ATOM	696	O	ASP	95	20.260	19.051	7.656	1.00	7.76	O
ATOM	697	N	LEU	96	20.712	19.841	9.709	1.00	6.38	N
ATOM	698	CA	LEU	96	21.698	20.816	9.255	1.00	7.15	C
ATOM	699	CB	LEU	96	21.289	22.213	9.728	1.00	5.12	C
ATOM	700	CG	LEU	96	19.933	22.666	9.179	1.00	6.78	C
ATOM	701	CD1	LEU	96	19.363	23.787	10.029	1.00	6.31	C
ATOM	702	CD2	LEU	96	20.098	23.108	7.732	1.00	5.24	C
ATOM	703	C	LEU	96	23.075	20.458	9.808	1.00	8.22	C
ATOM	704	O	LEU	96	23.421	20.829	10.931	1.00	9.02	O
ATOM	705	N	GLU	97	23.855	19.736	9.011	1.00	9.13	N.
ATOM	706	CA	GLU	97	25.188	19.312	9.419	1.00	11.45	C
ATOM	707	CB	GLU	97	25.103	18.046	10.267	1.00	12.11	C
ATOM	708	CG	GLU	97	24.442	16.884	9.547	1.00	14.61	C
ATOM	709	CD	GLU	97	24.505	15.592	10.331	1.00	16.43	C
ATOM	710	OE1	GLU	97	23.546	14.798	10.242	1.00	17.49	O
ATOM	711	OE2	GLU	97	25.516	15.361	11.028	1.00	17.37	O
ATOM	712	C	GLU	97	26.037	19.027	8.191	1.00	12.72	C
ATOM	713	O	GLU	97	25.550	19.056	7.065	1.00	13.94	O
ATOM	714	N	SER	98	27.306	18.720	8.419	1.00	14.86	N
ATOM	715	CA	SER	98	28.217	18.450	7.320	1.00	15.46	C
ATOM	716	CB	SER	98	29.593	19.017	7.656	1.00	16.12	C
ATOM	717	OG	SER	98	30.095	18.401	8.831	1.00	17.19	O
ATOM	718	C	SER	98	28.374	16.974	6.976	1.00	15.58	C
ATOM	719	O	SER	98	28.227	16.099	7.828	1.00	17.82	O
ATOM	720	N	GLU	99	28.662	16.714	5.706	1.00	15.08	N
ATOM	721	CA	GLU	99	28.922	15.365	5.224	1.00	15.08	C
ATOM	722	CB	GLU	99	28.148	15.094	3.929	1.00	13.57	C
ATOM	723	CG	GLU	99	26.764	14.516	4.186	1.00	16.43	C
ATOM	724	CD	GLU	99	25.853	14.559	2.974	1.00	16.13	C
ATOM	725	OE1	GLU	99	24.803	13.883	3.003	1.00	17.86	O
ATOM	726	OE2	GLU	99	26.173	15.272	2.003	1.00	16.14	O
ATOM	727	C	GLU	99	30.420	15.419	4.976	1.00	12.34	C
ATOM	728	O	GLU	99	30.884	15.445	3.832	1.00	13.69	O
ATOM	729	N	GLY	100	31.171	15.470	6.073	1.00	12.97	N
ATOM	730	CA	GLY	100	32.615	15.580	5.981	1.00	11.16	C
ATOM	731	C	GLY	100	32.929	17.061	5.901	1.00	10.42	C
ATOM	732	O	GLY	100	33.909	17.546	6.467	1.00	9.78	O
ATOM	733	N	SER	101	32.074	17.785	5.187	1.00	9.36	N
ATOM	734	CA	SER	101	32.212	19.223	5.019	1.00	10.10	C
ATOM	735	CB	SER	101	33.344	19.557	4.037	1.00	11.46	C
ATOM	736	OG	SER	101	33.086	19.059	2.738	1.00	10.00	O
ATOM	737	C	SER	101	30.886	19.768	4.507	1.00	11.13	C
ATOM	738	O	SER	101	30.020	19.004	4.078	1.00	10.22	O
ATOM	739	N	ASN	102	30.730	21.085	4.563	1.00	10.65	N

ATOM	740	CA	ASN	102	29.504	21.729	4.124	1.00	12.90	C
ATOM	741	CB	ASN	102	28.710	22.227	5.342	1.00	15.95	C
ATOM	742	CG	ASN	102	29.595	22.872	6.404	1.00	19.18	C
ATOM	743	OD1	ASN	102	29.687	22.387	7.538	1.00	17.84	O
ATOM	744	ND2	ASN	102	30.249	23.968	6.041	1.00	21.25	N
ATOM	745	C	ASN	102	29.800	22.882	3.173	1.00	11.78	C
ATOM	746	O	ASN	102	29.948	24.026	3.591	1.00	12.74	O
ATOM	747	N	PRO	103	29.890	22.589	1.868	1.00	11.22	N
ATOM	748	CD	PRO	103	29.799	21.265	1.228	1.00	13.47	C
ATOM	749	CA	PRO	103	30.171	23.626	0.873	1.00	11.23	C
ATOM	750	CB	PRO	103	30.047	22.872	-0.449	1.00	12.10	C
ATOM	751	CG	PRO	103	30.500	21.503	-0.087	1.00	15.52	C
ATOM	752	C	PRO	103	29.201	24.800	0.960	1.00	9.78	C
ATOM	753	O	PRO	103	29.567	25.938	0.669	1.00	11.44	O
ATOM	754	N	ALA	104	27.969	24.518	1.370	1.00	10.06	N
ATOM	755	CA	ALA	104	26.945	25.552	1.477	1.00	9.77	C
ATOM	756	CB	ALA	104	25.593	24.920	1.805	1.00	9.43	C
ATOM	757	C	ALA	104	27.259	26.645	2.492	1.00	10.12	C
ATOM	758	O	ALA	104	26.665	27.719	2.443	1.00	10.50	O
ATOM	759	N	CYS	105	28.176	26.394	3.419	1.00	10.38	N
ATOM	760	CA	CYS	105	28.501	27.431	4.394	1.00	11.80	C
ATOM	761	C	CYS	105	29.558	28.373	3.818	1.00	12.05	C
ATOM	762	O	CYS	105	29.999	29.319	4.473	1.00	14.71	O
ATOM	763	CB	CYS	105	28.934	26.799	5.717	1.00	10.94	C
ATOM	764	SG	CYS	105	27.626	25.690	6.344	1.00	13.45	S
ATOM	765	N	TRP	106	29.941	28.098	2.573	1.00	13.31	N
ATOM	766	CA	TRP	106	30.882	28.928	1.822	1.00	12.59	C
ATOM	767	CB	TRP	106	32.044	28.091	1.266	1.00	12.42	C
ATOM	768	CG	TRP	106	33.040	28.883	0.438	1.00	11.27	C
ATOM	769	CD2	TRP	106	33.845	29.981	0.883	1.00	9.64	C
ATOM	770	CE2	TRP	106	34.648	30.386	-0.211	1.00	10.03	C
ATOM	771	CE3	TRP	106	33.966	30.665	2.101	1.00	10.62	C
ATOM	772	CD1	TRP	106	33.376	28.673	-0.876	1.00	9.81	C
ATOM	773	NE1	TRP	106	34.343	29.573	-1.271	1.00	9.85	N
ATOM	774	CZ2	TRP	106	35.562	31.443	-0.121	1.00	10.58	C
ATOM	775	CZ3	TRP	106	34.874	31.716	2.191	1.00	9.76	C
ATOM	776	CH2	TRP	106	35.660	32.094	1.085	1.00	10.16	C
ATOM	777	C	TRP	106	30.035	29.459	0.669	1.00	12.66	C
ATOM	778	O	TRP	106	30.207	30.590	0.212	1.00	13.94	O
ATOM	779	N	GLY	107	29.104	28.621	0.219	1.00	12.13	N
ATOM	780	CA	GLY	107	28.221	28.991	-0.871	1.00	12.34	C
ATOM	781	C	GLY	107	27.156	29.989	-0.458	1.00	12.03	C
ATOM	782	O	GLY	107	26.623	30.711	-1.300	1.00	12.66	O
ATOM	783	N	LEU	108	26.836	30.014	0.834	1.00	10.41	N
ATOM	784	CA	LEU	108	25.842	30.934	1.387	1.00	10.93	C
ATOM	785	CB	LEU	108	24.599	30.182	1.876	1.00	9.64	C
ATOM	786	CG	LEU	108	23.557	29.642	0.895	1.00	10.44	C
ATOM	787	CD1	LEU	108	24.138	28.546	0.020	1.00	14.57	C
ATOM	788	CD2	LEU	108	22.387	29.102	1.703	1.00	8.67	C
ATOM	789	C	LEU	108	26.463	31.657	2.572	1.00	10.83	C
ATOM	790	O	LEU	108	27.368	31.133	3.222	1.00	12.83	O
ATOM	791	N	SER	109	25.970	32.858	2.857	1.00	10.52	N
ATOM	792	CA	SER	109	26.477	33.644	3.977	1.00	9.25	C
ATOM	793	CB	SER	109	26.250	35.129	3.723	1.00	10.50	C
ATOM	794	OG	SER	109	24.860	35.403	3.661	1.00	10.46	O
ATOM	795	C	SER	109	25.735	33.248	5.244	1.00	8.98	C
ATOM	796	O	SER	109	24.771	32.482	5.194	1.00	8.85	O

ATOM	797	N	ALA	110	26.180	33.778	6.378	1.00	8.82	N
ATOM	798	CA	ALA	110	25.527	33.484	7.643	1.00	9.10	C
ATOM	799	CB	ALA	110	26.222	34.226	8.783	1.00	8.95	C
ATOM	800	C	ALA	110	24.077	33.943	7.518	1.00	9.02	C
ATOM	801	O	ALA	110	23.150	33.227	7.903	1.00	9.21	O
ATOM	802	N	ALA	111	23.891	35.136	6.960	1.00	8.19	N
ATOM	803	CA	ALA	111	22.559	35.704	6.785	1.00	8.04	C
ATOM	804	CB	ALA	111	22.666	37.181	6.396	1.00	9.31	C
ATOM	805	C	ALA	111	21.707	34.957	5.761	1.00	8.75	C
ATOM	806	O	ALA	111	20.532	34.672	6.017	1.00	7.45	O
ATOM	807	N	SER	112	22.280	34.633	4.605	1.00	7.20	N
ATOM	808	CA	SER	112	21.497	33.937	3.590	1.00	7.19	C
ATOM	809	CB	SER	112	22.201	33.968	2.224	1.00	8.66	C
ATOM	810	OG	SER	112	23.333	33.122	2.174	1.00	9.40	O
ATOM	811	C	SER	112	21.175	32.506	4.007	1.00	6.96	C
ATOM	812	O	SER	112	20.168	31.947	3.570	1.00	6.83	O
ATOM	813	N	MET	113	22.020	31.916	4.853	1.00	5.86	N
ATOM	814	CA	MET	113	21.774	30.558	5.339	1.00	5.86	C
ATOM	815	CB	MET	113	23.002	30.001	6.063	1.00	7.18	C
ATOM	816	CG	MET	113	22.805	28.604	6.651	1.00	6.39	C
ATOM	817	SD	MET	113	22.445	27.320	5.427	1.00	5.83	S
ATOM	818	CE	MET	113	24.102	27.034	4.762	1.00	4.15	C
ATOM	819	C	MET	113	20.601	30.630	6.308	1.00	4.58	C
ATOM	820	O	MET	113	19.715	29.780	6.292	1.00	6.83	O
ATOM	821	N	VAL	114	20.605	31.644	7.164	1.00	5.66	N
ATOM	822	CA	VAL	114	19.511	31.811	8.111	1.00	5.55	C
ATOM	823	CB	VAL	114	19.744	33.033	9.022	1.00	4.96	C
ATOM	824	CG1	VAL	114	18.462	33.378	9.779	1.00	5.53	C
ATOM	825	CG2	VAL	114	20.869	32.727	10.005	1.00	7.48	C
ATOM	826	C	VAL	114	18.231	32.007	7.305	1.00	6.81	C
ATOM	827	O	VAL	114	17.179	31.458	7.639	1.00	6.67	O
ATOM	828	N	ALA	115	18.328	32.781	6.229	1.00	6.40	N
ATOM	829	CA	ALA	115	17.166	33.024	5.387	1.00	6.09	C
ATOM	830	CB	ALA	115	17.485	34.077	4.334	1.00	7.76	C
ATOM	831	C	ALA	115	16.711	31.733	4.718	1.00	5.47	C
ATOM	832	O	ALA	115	15.519	31.522	4.505	1.00	6.22	O
ATOM	833	N	TRP	116	17.664	30.868	4.387	1.00	5.57	N
ATOM	834	CA	TRP	116	17.338	29.597	3.747	1.00	4.93	C
ATOM	835	CB	TRP	116	18.610	28.876	3.300	1.00	5.94	C
ATOM	836	CG	TRP	116	18.337	27.652	2.467	1.00	4.95	C
ATOM	837	CD2	TRP	116	18.032	26.337	2.949	1.00	4.98	C
ATOM	838	CE2	TRP	116	17.813	25.518	1.818	1.00	4.36	C
ATOM	839	CE3	TRP	116	17.922	25.772	4.226	1.00	5.66	C
ATOM	840	CD1	TRP	116	18.291	27.580	1.104	1.00	4.31	C
ATOM	841	NE1	TRP	116	17.977	26.300	0.706	1.00	5.26	N
ATOM	842	CZ2	TRP	116	17.489	24.164	1.927	1.00	3.53	C
ATOM	843	CZ3	TRP	116	17.600	24.421	4.335	1.00	6.55	C
ATOM	844	CH2	TRP	116	17.387	23.633	3.190	1.00	4.05	C
ATOM	845	C	TRP	116	16.592	28.722	4.745	1.00	5.49	C
ATOM	846	O	TRP	116	15.571	28.116	4.418	1.00	6.25	O
ATOM	847	N	ILE	117	17.121	28.645	5.960	1.00	5.56	N
ATOM	848	CA	ILE	117	16.499	27.850	7.008	1.00	5.74	C
ATOM	849	CB	ILE	117	17.356	27.862	8.293	1.00	5.50	C
ATOM	850	CG2	ILE	117	16.648	27.099	9.410	1.00	6.77	C
ATOM	851	CG1	ILE	117	18.716	27.225	8.004	1.00	7.15	C
ATOM	852	CD1	ILE	117	19.708	27.359	9.150	1.00	6.65	C
ATOM	853	C	ILE	117	15.109	28.402	7.308	1.00	5.54	C

ATOM	854	O	ILE	117	14.161	27.639	7.486	1.00	7.15	O
ATOM	855	N	LYS	118	14.981	29.725	7.354	1.00	5.52	N
ATOM	856	CA	LYS	118	13.681	30.329	7.628	1.00	5.64	C
ATOM	857	CB	LYS	118	13.822	31.836	7.890	1.00	3.95	C
ATOM	858	CG	LYS	118	12.549	32.467	8.471	1.00	7.66	C
ATOM	859	CD	LYS	118	12.811	33.845	9.050	1.00	8.90	C
ATOM	860	CE	LYS	118	11.577	34.409	9.748	1.00	11.22	C
ATOM	861	NZ	LYS	118	10.450	34.632	8.805	1.00	12.63	N
ATOM	862	C	LYS	118	12.712	30.074	6.475	1.00	6.41	C
ATOM	863	O	LYS	118	11.509	29.942	6.697	1.00	5.71	O
ATOM	864	N	ALA	119	13.224	29.995	5.246	1.00	5.71	N
ATOM	865	CA	ALA	119	12.351	29.723	4.101	1.00	5.22	C
ATOM	866	CB	ALA	119	13.122	29.859	2.789	1.00	5.16	C
ATOM	867	C	ALA	119	11.801	28.306	4.245	1.00	5.06	C
ATOM	868	O	ALA	119	10.622	28.058	4.012	1.00	6.18	O
ATOM	869	N	PHE	120	12.663	27.374	4.638	1.00	6.13	N
ATOM	870	CA	PHE	120	12.236	25.991	4.826	1.00	4.74	C
ATOM	871	CB	PHE	120	13.453	25.103	5.144	1.00	5.86	C
ATOM	872	CG	PHE	120	13.123	23.641	5.334	1.00	4.65	C
ATOM	873	CD1	PHE	120	12.472	23.197	6.483	1.00	4.93	C
ATOM	874	CD2	PHE	120	13.477	22.706	4.364	1.00	5.79	C
ATOM	875	CE1	PHE	120	12.180	21.845	6.665	1.00	4.29	C
ATOM	876	CE2	PHE	120	13.193	21.353	4.535	1.00	5.66	C
ATOM	877	CZ	PHE	120	12.541	20.921	5.691	1.00	3.76	C
ATOM	878	C	PHE	120	11.231	25.927	5.974	1.00	6.26	C
ATOM	879	O	PHE	120	10.149	25.363	5.830	1.00	5.53	O
ATOM	880	N	SER	121	11.598	26.523	7.105	1.00	4.88	N
ATOM	881	CA	SER	121	10.762	26.524	8.305	1.00	6.34	C
ATOM	882	CB	SER	121	11.528	27.184	9.458	1.00	7.38	C
ATOM	883	OG	SER	121	10.768	27.196	10.655	1.00	7.54	O
ATOM	884	C	SER	121	9.416	27.215	8.114	1.00	6.63	C
ATOM	885	O	SER	121	8.373	26.666	8.483	1.00	6.24	O
ATOM	886	N	ASP	122	9.437	28.417	7.545	1.00	6.31	N
ATOM	887	CA	ASP	122	8.201	29.160	7.313	1.00	8.29	C
ATOM	888	CB	ASP	122	8.492	30.529	6.689	1.00	8.06	C
ATOM	889	CG	ASP	122	8.996	31.546	7.696	1.00	11.26	C
ATOM	890	OD1	ASP	122	8.941	31.279	8.916	1.00	10.48	O
ATOM	891	OD2	ASP	122	9.436	32.631	7.260	1.00	13.64	O
ATOM	892	C	ASP	122	7.276	28.377	6.388	1.00	7.69	C
ATOM	893	O	ASP	122	6.062	28.371	6.579	1.00	8.00	O
ATOM	894	N	ARG	123	7.852	27.719	5.383	1.00	7.92	N
ATOM	895	CA	ARG	123	7.052	26.943	4.443	1.00	7.09	C
ATOM	896	CB	ARG	123	7.913	26.452	3.278	1.00	7.29	C
ATOM	897	CG	ARG	123	7.174	25.542	2.303	1.00	7.78	C
ATOM	898	CD	ARG	123	5.952	26.235	1.727	1.00	7.65	C
ATOM	899	NE	ARG	123	5.341	25.453	0.660	1.00	9.96	N
ATOM	900	CZ	ARG	123	4.227	25.806	0.028	1.00	11.08	C
ATOM	901	NH1	ARG	123	3.601	26.925	0.364	1.00	11.91	N
ATOM	902	NH2	ARG	123	3.754	25.053	-0.954	1.00	13.71	N
ATOM	903	C	ARG	123	6.434	25.749	5.148	1.00	7.00	C
ATOM	904	O	ARG	123	5.235	25.502	5.043	1.00	7.06	O
ATOM	905	N	TYR	124	7.266	25.007	5.870	1.00	5.26	N
ATOM	906	CA	TYR	124	6.796	23.839	6.586	1.00	5.89	C
ATOM	907	CB	TYR	124	7.942	23.228	7.393	1.00	4.54	C
ATOM	908	CG	TYR	124	7.626	21.855	7.927	1.00	5.89	C
ATOM	909	CD1	TYR	124	7.852	20.719	7.153	1.00	5.92	C
ATOM	910	CE1	TYR	124	7.505	19.452	7.616	1.00	6.20	C

ATOM	911	CD2	TYR	124	7.047	21.695	9.185	1.00	5.65	C
ATOM	912	CE2	TYR	124	6.694	20.437	9.657	1.00	5.16	C
ATOM	913	CZ	TYR	124	6.924	19.320	8.868	1.00	5.96	C
ATOM	914	OH	TYR	124	6.559	18.077	9.331	1.00	5.59	O
ATOM	915	C	TYR	124	5.664	24.246	7.523	1.00	6.49	C
ATOM	916	O	TYR	124	4.624	23.590	7.588	1.00	6.10	O
ATOM	917	N	HIS	125	5.863	25.342	8.245	1.00	5.93	N
ATOM	918	CA	HIS	125	4.843	25.808	9.175	1.00	8.11	C
ATOM	919	CB	HIS	125	5.420	26.915	10.064	1.00	10.24	C
ATOM	920	CG	HIS	125	4.439	27.476	11.046	1.00	11.84	C
ATOM	921	CD2	HIS	125	4.161	27.126	12.324	1.00	12.02	C
ATOM	922	ND1	HIS	125	3.591	28.518	10.740	1.00	13.26	N
ATOM	923	CE1	HIS	125	2.833	28.788	11.788	1.00	12.88	C
ATOM	924	NE2	HIS	125	3.159	27.958	12.763	1.00	12.15	N
ATOM	925	C	HIS	125	3.589	26.299	8.453	1.00	9.48	C
ATOM	926	O	HIS	125	2.465	26.063	8.904	1.00	7.61	O
ATOM	927	N	ALA	126	3.783	26.959	7.319	1.00	8.50	N
ATOM	928	CA	ALA	126	2.662	27.490	6.555	1.00	9.44	C
ATOM	929	CB	ALA	126	3.172	28.231	5.319	1.00	7.85	C
ATOM	930	C	ALA	126	1.681	26.407	6.139	1.00	9.97	C
ATOM	931	O	ALA	126	0.472	26.631	6.146	1.00	11.14	O
ATOM	932	N	VAL	127	2.194	25.230	5.796	1.00	8.87	N
ATOM	933	CA	VAL	127	1.330	24.143	5.352	1.00	9.14	C
ATOM	934	CB	VAL	127	1.851	23.547	4.026	1.00	8.34	C
ATOM	935	CG1	VAL	127	1.803	24.606	2.937	1.00	9.59	C
ATOM	936	CG2	VAL	127	3.272	23.037	4.202	1.00	10.45	C
ATOM	937	C	VAL	127	1.073	23.002	6.338	1.00	9.45	C
ATOM	938	O	VAL	127	0.238	22.142	6.074	1.00	11.16	O
ATOM	939	N	THR	128	1.779	22.971	7.463	1.00	8.70	N
ATOM	940	CA	THR	128	1.537	21.903	8.434	1.00	8.60	C
ATOM	941	CB	THR	128	2.800	21.081	8.738	1.00	7.61	C
ATOM	942	OG1	THR	128	3.708	21.882	9.502	1.00	6.21	O
ATOM	943	CG2	THR	128	3.463	20.616	7.454	1.00	8.90	C
ATOM	944	C	THR	128	1.051	22.459	9.762	1.00	8.53	C
ATOM	945	O	THR	128	0.467	21.732	10.571	1.00	9.76	O
ATOM	946	N	GLY	129	1.303	23.742	9.992	1.00	8.66	N
ATOM	947	CA	GLY	129	0.898	24.362	11.237	1.00	8.30	C
ATOM	948	C	GLY	129	1.922	24.169	12.342	1.00	9.28	C
ATOM	949	O	GLY	129	1.751	24.679	13.449	1.00	10.07	O
ATOM	950	N	ARG	130	2.988	23.426	12.049	1.00	7.75	N
ATOM	951	CA	ARG	130	4.036	23.181	13.038	1.00	7.20	C
ATOM	952	CB	ARG	130	4.219	21.676	13.295	1.00	8.34	C
ATOM	953	CG	ARG	130	2.962	20.886	13.613	1.00	9.26	C
ATOM	954	CD	ARG	130	2.223	21.463	14.801	1.00	9.56	C
ATOM	955	NE	ARG	130	3.045	21.527	16.006	1.00	8.37	N
ATOM	956	CZ	ARG	130	3.352	20.487	16.775	1.00	6.86	C
ATOM	957	NH1	ARG	130	2.911	19.274	16.474	1.00	7.90	N
ATOM	958	NH2	ARG	130	4.096	20.665	17.859	1.00	8.03	N
ATOM	959	C	ARG	130	5.370	23.710	12.538	1.00	7.51	C
ATOM	960	O	ARG	130	5.648	23.669	11.343	1.00	8.16	O
ATOM	961	N	TYR	131	6.194	24.211	13.449	1.00	5.93	N
ATOM	962	CA	TYR	131	7.523	24.657	13.061	1.00	6.35	C
ATOM	963	CB	TYR	131	8.064	25.688	14.051	1.00	6.17	C
ATOM	964	CG	TYR	131	7.524	27.074	13.800	1.00	9.46	C
ATOM	965	CD1	TYR	131	7.899	27.787	12.665	1.00	7.93	C
ATOM	966	CE1	TYR	131	7.380	29.050	12.406	1.00	10.47	C
ATOM	967	CD2	TYR	131	6.616	27.660	14.677	1.00	9.06	C

ATOM	968	CE2	TYR	131	6.092	28.924	14.428	1.00	9.37	C
ATOM	969	CZ	TYR	131	6.478	29.611	13.292	1.00	11.26	C
ATOM	970	OH	TYR	131	5.960	30.859	13.035	1.00	14.73	O
ATOM	971	C	TYR	131	8.383	23.399	13.094	1.00	5.67	C
ATOM	972	O	TYR	131	8.314	22.610	14.038	1.00	6.46	O
ATOM	973	N	PRO	132	9.198	23.180	12.056	1.00	5.94	N
ATOM	974	CD	PRO	132	9.438	23.996	10.852	1.00	6.85	C
ATOM	975	CA	PRO	132	10.034	21.979	12.060	1.00	5.57	C
ATOM	976	CB	PRO	132	10.618	21.967	10.651	1.00	5.41	C
ATOM	977	CG	PRO	132	10.748	23.432	10.340	1.00	6.75	C
ATOM	978	C	PRO	132	11.116	22.020	13.130	1.00	5.77	C
ATOM	979	O	PRO	132	11.564	23.091	13.533	1.00	6.39	O
ATOM	980	N	MET	133	11.527	20.851	13.602	1.00	6.54	N
ATOM	981	CA	MET	133	12.582	20.791	14.599	1.00	5.74	C
ATOM	982	CB	MET	133	12.589	19.428	15.293	1.00	5.49	C
ATOM	983	CG	MET	133	11.243	19.045	15.887	1.00	6.61	C
ATOM	984	SD	MET	133	11.370	17.686	17.060	1.00	7.12	S
ATOM	985	CE	MET	133	11.779	16.332	15.971	1.00	7.89	C
ATOM	986	C	MET	133	13.876	20.996	13.824	1.00	6.38	C
ATOM	987	O	MET	133	14.016	20.494	12.709	1.00	6.90	O
ATOM	988	N	LEU	134	14.814	21.737	14.403	1.00	6.24	N
ATOM	989	CA	LEU	134	16.082	21.991	13.738	1.00	5.28	C
ATOM	990	CB	LEU	134	16.423	23.481	13.796	1.00	4.73	C
ATOM	991	CG	LEU	134	15.376	24.420	13.188	1.00	3.95	C
ATOM	992	CD1	LEU	134	15.842	25.852	13.334	1.00	4.00	C
ATOM	993	CD2	LEU	134	15.154	24.081	11.719	1.00	5.80	C
ATOM	994	C	LEU	134	17.195	21.185	14.391	1.00	4.50	C
ATOM	995	O	LEU	134	17.531	21.406	15.556	1.00	5.04	O
ATOM	996	N	TYR	135	17.752	20.248	13.630	1.00	5.13	N
ATOM	997	CA	TYR	135	18.833	19.388	14.100	1.00	5.66	C
ATOM	998	CB	TYR	135	18.658	17.967	13.543	1.00	5.80	C
ATOM	999	CG	TYR	135	19.871	17.061	13.699	1.00	6.23	C
ATOM	1000	CD1	TYR	135	20.975	17.184	12.852	1.00	8.60	C
ATOM	1001	CE1	TYR	135	22.083	16.354	12.985	1.00	11.43	C
ATOM	1002	CD2	TYR	135	19.909	16.078	14.689	1.00	8.99	C
ATOM	1003	CE2	TYR	135	21.015	15.240	14.831	1.00	8.98	C
ATOM	1004	CZ	TYR	135	22.098	15.386	13.973	1.00	11.86	C
ATOM	1005	OH	TYR	135	23.194	14.567	14.107	1.00	11.98	O
ATOM	1006	C	TYR	135	20.168	19.955	13.642	1.00	5.40	C
ATOM	1007	O	TYR	135	20.332	20.302	12.478	1.00	6.64	O
ATOM	1008	N	THR	136	21.127	20.043	14.556	1.00	5.74	N
ATOM	1009	CA	THR	136	22.438	20.564	14.195	1.00	5.79	C
ATOM	1010	CB	THR	136	22.365	22.090	13.899	1.00	6.84	C
ATOM	1011	OG1	THR	136	23.570	22.518	13.252	1.00	6.77	O
ATOM	1012	CG2	THR	136	22.185	22.892	15.196	1.00	7.42	C
ATOM	1013	C	THR	136	23.409	20.325	15.338	1.00	7.50	C
ATOM	1014	O	THR	136	23.041	19.759	16.370	1.00	6.80	O
ATOM	1015	N	ASN	137	24.659	20.714	15.129	1.00	7.33	N
ATOM	1016	CA	ASN	137	25.661	20.616	16.180	1.00	9.21	C
ATOM	1017	CB	ASN	137	26.765	19.599	15.836	1.00	10.06	C
ATOM	1018	CG	ASN	137	27.450	19.882	14.520	1.00	9.14	C
ATOM	1019	OD1	ASN	137	28.093	20.913	14.351	1.00	11.07	O
ATOM	1020	ND2	ASN	137	27.326	18.950	13.579	1.00	10.75	N
ATOM	1021	C	ASN	137	26.202	22.036	16.329	1.00	9.89	C
ATOM	1022	O	ASN	137	26.064	22.861	15.421	1.00	7.94	O
ATOM	1023	N	PRO	138	26.803	22.355	17.481	1.00	10.12	N
ATOM	1024	CD	PRO	138	27.023	21.534	18.683	1.00	10.95	C

ATOM	1025	CA	PRO	138	27.320	23.712	17.662	1.00	10.56	C
ATOM	1026	CB	PRO	138	27.883	23.686	19.087	1.00	12.11	C
ATOM	1027	CG	PRO	138	28.175	22.237	19.332	1.00	14.00	C
ATOM	1028	C	PRO	138	28.317	24.232	16.626	1.00	9.14	C
ATOM	1029	O	PRO	138	28.347	25.430	16.350	1.00	10.01	O
ATOM	1030	N	SER	139	29.125	23.345	16.051	1.00	9.22	N
ATOM	1031	CA	SER	139	30.102	23.765	15.051	1.00	8.43	C
ATOM	1032	CB	SER	139	31.062	22.616	14.739	1.00	9.24	C
ATOM	1033	OG	SER	139	31.746	22.215	15.913	1.00	11.39	O
ATOM	1034	C	SER	139	29.435	24.245	13.765	1.00	9.75	C
ATOM	1035	O	SER	139	29.808	25.281	13.212	1.00	9.91	O
ATOM	1036	N	TRP	140	28.451	23.493	13.288	1.00	7.66	N
ATOM	1037	CA	TRP	140	27.745	23.874	12.071	1.00	7.82	C
ATOM	1038	CB	TRP	140	26.735	22.792	11.671	1.00	7.68	C
ATOM	1039	CG	TRP	140	26.159	22.989	10.292	1.00	7.35	C
ATOM	1040	CD2	TRP	140	25.057	23.833	9.927	1.00	7.12	C
ATOM	1041	CE2	TRP	140	24.910	23.743	8.524	1.00	7.95	C
ATOM	1042	CE3	TRP	140	24.183	24.660	10.647	1.00	5.67	C
ATOM	1043	CD1	TRP	140	26.617	22.437	9.127	1.00	9.35	C
ATOM	1044	NE1	TRP	140	25.873	22.885	8.064	1.00	6.76	N
ATOM	1045	CZ2	TRP	140	23.924	24.448	7.825	1.00	5.59	C
ATOM	1046	CZ3	TRP	140	23.201	25.363	9.951	1.00	6.56	C
ATOM	1047	CH2	TRP	140	23.081	25.252	8.554	1.00	5.81	C
ATOM	1048	C	TRP	140	26.992	25.182	12.294	1.00	7.78	C
ATOM	1049	O	TRP	140	27.078	26.110	11.489	1.00	6.90	O
ATOM	1050	N	TRP	141	26.255	25.251	13.397	1.00	7.53	N
ATOM	1051	CA	TRP	141	25.463	26.437	13.685	1.00	6.21	C
ATOM	1052	CB	TRP	141	24.636	26.224	14.957	1.00	6.26	C
ATOM	1053	CG	TRP	141	23.451	27.136	15.013	1.00	5.55	C
ATOM	1054	CD2	TRP	141	22.261	27.033	14.222	1.00	4.15	C
ATOM	1055	CE2	TRP	141	21.452	28.145	14.541	1.00	4.26	C
ATOM	1056	CE3	TRP	141	21.803	26.112	13.271	1.00	4.60	C
ATOM	1057	CD1	TRP	141	23.318	28.270	15.764	1.00	5.54	C
ATOM	1058	NE1	TRP	141	22.120	28.884	15.484	1.00	3.78	N
ATOM	1059	CZ2	TRP	141	20.205	28.361	13.943	1.00	6.58	C
ATOM	1060	CZ3	TRP	141	20.564	26.325	12.675	1.00	4.82	C
ATOM	1061	CH2	TRP	141	19.778	27.442	13.014	1.00	5.80	C
ATOM	1062	C	TRP	141	26.307	27.698	13.806	1.00	6.88	C
ATOM	1063	O	TRP	141	25.942	28.749	13.282	1.00	7.07	O
ATOM	1064	N	SER	142	27.440	27.593	14.488	1.00	8.12	N
ATOM	1065	CA	SER	142	28.317	28.742	14.661	1.00	8.83	C
ATOM	1066	CB	SER	142	29.455	28.401	15.626	1.00	11.85	C
ATOM	1067	OG	SER	142	28.970	28.218	16.945	1.00	17.77	O
ATOM	1068	C	SER	142	28.911	29.257	13.354	1.00	9.56	C
ATOM	1069	O	SER	142	28.850	30.452	13.069	1.00	10.48	O
ATOM	1070	N	SER	143	29.468	28.353	12.555	1.00	10.15	N
ATOM	1071	CA	SER	143	30.119	28.730	11.302	1.00	10.98	C
ATOM	1072	CB	SER	143	31.191	27.699	10.952	1.00	12.28	C
ATOM	1073	OG	SER	143	30.607	26.446	10.652	1.00	12.96	O
ATOM	1074	C	SER	143	29.217	28.921	10.089	1.00	12.40	C
ATOM	1075	O	SER	143	29.628	29.536	9.104	1.00	13.14	O
ATOM	1076	N	CYS	144	27.996	28.407	10.151	1.00	9.27	N
ATOM	1077	CA	CYS	144	27.088	28.521	9.015	1.00	8.38	C
ATOM	1078	C	CYS	144	25.988	29.560	9.165	1.00	9.05	C
ATOM	1079	O	CYS	144	25.452	30.036	8.167	1.00	7.37	O
ATOM	1080	CB	CYS	144	26.450	27.167	8.728	1.00	9.36	C
ATOM	1081	SG	CYS	144	27.653	25.854	8.369	1.00	9.03	S

ATOM	1082	N	THR	145	25.640	29.907	10.402	1.00	8.33	N
ATOM	1083	CA	THR	145	24.576	30.886	10.626	1.00	8.29	C
ATOM	1084	CB	THR	145	23.361	30.265	11.345	1.00	7.26	C
ATOM	1085	OG1	THR	145	23.675	30.077	12.730	1.00	6.27	O
ATOM	1086	CG2	THR	145	22.994	28.930	10.734	1.00	6.48	C
ATOM	1087	C	THR	145	25.029	32.047	11.494	1.00	9.03	C
ATOM	1088	O	THR	145	24.233	32.932	11.810	1.00	9.06	O
ATOM	1089	N	GLY	146	26.300	32.039	11.883	1.00	9.76	N
ATOM	1090	CA	GLY	146	26.807	33.086	12.749	1.00	10.61	C
ATOM	1091	C	GLY	146	26.199	32.924	14.130	1.00	10.01	C
ATOM	1092	O	GLY	146	26.002	33.903	14.848	1.00	11.45	O
ATOM	1093	N	ASN	147	25.909	31.678	14.499	1.00	9.27	N
ATOM	1094	CA	ASN	147	25.301	31.349	15.792	1.00	8.39	C
ATOM	1095	CB	ASN	147	26.243	31.694	16.950	1.00	9.62	C
ATOM	1096	CG	ASN	147	25.890	30.947	18.226	1.00	11.85	C
ATOM	1097	OD1	ASN	147	26.076	31.458	19.334	1.00	15.35	O
ATOM	1098	ND2	ASN	147	25.396	29.721	18.077	1.00	7.17	N
ATOM	1099	C	ASN	147	23.989	32.112	15.960	1.00	8.83	C
ATOM	1100	O	ASN	147	23.712	32.688	17.016	1.00	10.35	O
ATOM	1101	N	SER	148	23.178	32.084	14.908	1.00	6.51	N
ATOM	1102	CA	SER	148	21.893	32.777	14.865	1.00	6.63	C
ATOM	1103	CB	SER	148	21.270	32.603	13.480	1.00	6.36	C
ATOM	1104	OG	SER	148	19.988	33.206	13.413	1.00	6.63	O
ATOM	1105	C	SER	148	20.859	32.368	15.906	1.00	6.88	C
ATOM	1106	O	SER	148	20.688	31.186	16.193	1.00	6.76	O
ATOM	1107	N	ASN	149	20.162	33.361	16.460	1.00	6.30	N
ATOM	1108	CA	ASN	149	19.104	33.103	17.434	1.00	6.68	C
ATOM	1109	CB	ASN	149	19.257	34.003	18.671	1.00	8.38	C
ATOM	1110	CG	ASN	149	19.309	35.482	18.325	1.00	9.81	C
ATOM	1111	OD1	ASN	149	18.868	35.904	17.255	1.00	10.25	O
ATOM	1112	ND2	ASN	149	19.836	36.283	19.247	1.00	10.83	N
ATOM	1113	C	ASN	149	17.746	33.360	16.781	1.00	7.16	C
ATOM	1114	O	ASN	149	16.742	33.551	17.463	1.00	7.35	O
ATOM	1115	N	ALA	150	17.721	33.342	15.452	1.00	7.01	N
ATOM	1116	CA	ALA	150	16.503	33.606	14.692	1.00	5.30	C
ATOM	1117	CB	ALA	150	16.835	33.660	13.202	1.00	4.71	C
ATOM	1118	C	ALA	150	15.348	32.634	14.913	1.00	5.27	C
ATOM	1119	O	ALA	150	14.188	32.997	14.719	1.00	5.06	O
ATOM	1120	N	PHE	151	15.650	31.411	15.334	1.00	5.33	N
ATOM	1121	CA	PHE	151	14.600	30.408	15.497	1.00	5.23	C
ATOM	1122	CB	PHE	151	14.959	29.177	14.661	1.00	6.48	C
ATOM	1123	CG	PHE	151	15.387	29.513	13.265	1.00	5.41	C
ATOM	1124	CD1	PHE	151	16.736	29.622	12.943	1.00	7.17	C
ATOM	1125	CD2	PHE	151	14.439	29.796	12.290	1.00	7.26	C
ATOM	1126	CE1	PHE	151	17.135	30.017	11.672	1.00	7.80	C
ATOM	1127	CE2	PHE	151	14.824	30.192	11.013	1.00	9.09	C
ATOM	1128	CZ	PHE	151	16.174	30.305	10.703	1.00	7.73	C
ATOM	1129	C	PHE	151	14.290	29.976	16.922	1.00	5.37	C
ATOM	1130	O	PHE	151	13.454	29.100	17.142	1.00	6.52	O
ATOM	1131	N	VAL	152	14.945	30.601	17.889	1.00	6.70	N
ATOM	1132	CA	VAL	152	14.748	30.240	19.285	1.00	6.46	C
ATOM	1133	CB	VAL	152	15.605	31.130	20.206	1.00	7.12	C
ATOM	1134	CG1	VAL	152	15.355	30.768	21.664	1.00	6.22	C
ATOM	1135	CG2	VAL	152	17.073	30.951	19.863	1.00	7.66	C
ATOM	1136	C	VAL	152	13.312	30.274	19.795	1.00	7.88	C
ATOM	1137	O	VAL	152	12.936	29.450	20.627	1.00	8.32	O
ATOM	1138	N	ASN	153	12.509	31.212	19.303	1.00	7.11	N

ATOM	1139	CA	ASN	153	11.128	31.328	19.764	1.00	9.14	C
ATOM	1140	CB	ASN	153	10.730	32.799	19.869	1.00	10.11	C
ATOM	1141	CG	ASN	153	11.494	33.524	20.951	1.00	11.34	C
ATOM	1142	OD1	ASN	153	12.709	33.702	20.856	1.00	12.48	O
ATOM	1143	ND2	ASN	153	10.788	33.938	21.996	1.00	13.75	N
ATOM	1144	C	ASN	153	10.094	30.601	18.924	1.00	9.65	C
ATOM	1145	O	ASN	153	8.896	30.736	19.166	1.00	13.10	O
ATOM	1146	N	THR	154	10.543	29.829	17.943	1.00	8.95	N
ATOM	1147	CA	THR	154	9.602	29.110	17.102	1.00	9.50	C
ATOM	1148	CB	THR	154	9.478	29.767	15.713	1.00	8.87	C
ATOM	1149	OG1	THR	154	10.784	29.976	15.160	1.00	10.22	O
ATOM	1150	CG2	THR	154	8.750	31.096	15.812	1.00	9.45	C
ATOM	1151	C	THR	154	9.925	27.638	16.890	1.00	9.13	C
ATOM	1152	O	THR	154	9.029	26.797	16.945	1.00	9.49	O
ATOM	1153	N	ASN	155	11.198	27.323	16.669	1.00	6.96	N
ATOM	1154	CA	ASN	155	11.592	25.944	16.391	1.00	6.63	C
ATOM	1155	CB	ASN	155	12.539	25.902	15.189	1.00	6.42	C
ATOM	1156	CG	ASN	155	12.020	26.678	14.004	1.00	5.51	C
ATOM	1157	OD1	ASN	155	11.935	27.905	14.042	1.00	7.58	O
ATOM	1158	ND2	ASN	155	11.671	25.963	12.935	1.00	5.42	N
ATOM	1159	C	ASN	155	12.266	25.171	17.509	1.00	6.93	C
ATOM	1160	O	ASN	155	13.142	25.691	18.189	1.00	7.78	O
ATOM	1161	N	PRO	156	11.858	23.908	17.713	1.00	7.27	N
ATOM	1162	CD	PRO	156	10.630	23.255	17.226	1.00	7.76	C
ATOM	1163	CA	PRO	156	12.492	23.111	18.765	1.00	6.77	C
ATOM	1164	CB	PRO	156	11.614	21.862	18.836	1.00	8.51	C
ATOM	1165	CG	PRO	156	10.269	22.357	18.387	1.00	9.68	C
ATOM	1166	C	PRO	156	13.896	22.779	18.260	1.00	6.90	C
ATOM	1167	O	PRO	156	14.097	22.598	17.060	1.00	5.65	O
ATOM	1168	N	LEU	157	14.862	22.706	19.164	1.00	5.35	N
ATOM	1169	CA	LEU	157	16.231	22.389	18.777	1.00	4.26	C
ATOM	1170	CB	LEU	157	17.217	23.283	19.536	1.00	3.51	C
ATOM	1171	CG	LEU	157	18.695	22.867	19.514	1.00	5.10	C
ATOM	1172	CD1	LEU	157	19.277	23.099	18.134	1.00	7.27	C
ATOM	1173	CD2	LEU	157	19.472	23.670	20.557	1.00	5.97	C
ATOM	1174	C	LEU	157	16.576	20.939	19.077	1.00	4.64	C
ATOM	1175	O	LEU	157	16.276	20.440	20.156	1.00	5.14	O
ATOM	1176	N	VAL	158	17.185	20.262	18.109	1.00	4.84	N
ATOM	1177	CA	VAL	158	17.634	18.892	18.312	1.00	5.58	C
ATOM	1178	CB	VAL	158	17.122	17.930	17.216	1.00	4.63	C
ATOM	1179	CG1	VAL	158	17.574	16.508	17.531	1.00	4.85	C
ATOM	1180	CG2	VAL	158	15.600	17.973	17.166	1.00	5.70	C
ATOM	1181	C	VAL	158	19.149	19.042	18.242	1.00	6.69	C
ATOM	1182	O	VAL	158	19.718	19.324	17.180	1.00	7.94	O
ATOM	1183	N	LEU	159	19.791	18.885	19.395	1.00	6.45	N
ATOM	1184	CA	LEU	159	21.231	19.062	19.518	1.00	7.21	C
ATOM	1185	CB	LEU	159	21.527	19.794	20.829	1.00	7.16	C
ATOM	1186	CG	LEU	159	22.989	20.072	21.179	1.00	9.05	C
ATOM	1187	CD1	LEU	159	23.636	20.895	20.083	1.00	9.08	C
ATOM	1188	CD2	LEU	159	23.052	20.807	22.505	1.00	11.52	C
ATOM	1189	C	LEU	159	22.025	17.771	19.466	1.00	6.95	C
ATOM	1190	O	LEU	159	21.777	16.852	20.243	1.00	7.25	O
ATOM	1191	N	ALA	160	22.985	17.712	18.549	1.00	7.68	N
ATOM	1192	CA	ALA	160	23.830	16.536	18.398	1.00	10.07	C
ATOM	1193	CB	ALA	160	24.061	16.246	16.918	1.00	11.74	C
ATOM	1194	C	ALA	160	25.168	16.723	19.105	1.00	10.32	C
ATOM	1195	O	ALA	160	25.972	17.573	18.720	1.00	10.47	O

ATOM	1196	N	ARG	161	25.397	15.937	20.151	1.00	11.17	N
ATOM	1197	CA	ARG	161	26.651	15.992	20.892	1.00	13.72	C
ATOM	1198	CB	ARG	161	26.691	17.184	21.849	1.00	16.52	C
ATOM	1199	CG	ARG	161	28.115	17.538	22.259	1.00	19.62	C
ATOM	1200	CD	ARG	161	28.185	18.352	23.532	1.00	21.47	C
ATOM	1201	NE	ARG	161	29.533	18.872	23.744	1.00	26.28	N
ATOM	1202	CZ	ARG	161	30.013	19.255	24.922	1.00	27.04	C
ATOM	1203	NH1	ARG	161	29.258	19.172	26.006	1.00	26.91	N
ATOM	1204	NH2	ARG	161	31.246	19.734	25.015	1.00	27.44	N
ATOM	1205	C	ARG	161	26.784	14.708	21.689	1.00	15.20	C
ATOM	1206	O	ARG	161	26.144	14.540	22.725	1.00	14.56	O
ATOM	1207	N	TYR	162	27.616	13.798	21.201	1.00	14.70	N
ATOM	1208	CA	TYR	162	27.803	12.525	21.875	1.00	16.66	C
ATOM	1209	CB	TYR	162	28.195	11.451	20.858	1.00	17.80	C
ATOM	1210	CG	TYR	162	27.317	11.424	19.619	1.00	20.36	C
ATOM	1211	CD1	TYR	162	26.061	12.036	19.605	1.00	21.29	C
ATOM	1212	CE1	TYR	162	25.258	12.012	18.465	1.00	22.32	C
ATOM	1213	CD2	TYR	162	27.744	10.783	18.459	1.00	21.81	C
ATOM	1214	CE2	TYR	162	26.948	10.751	17.318	1.00	21.85	C
ATOM	1215	CZ	TYR	162	25.710	11.366	17.325	1.00	23.41	C
ATOM	1216	OH	TYR	162	24.931	11.334	16.189	1.00	23.45	O
ATOM	1217	C	TYR	162	28.854	12.635	22.971	1.00	16.89	C
ATOM	1218	O	TYR	162	29.988	12.192	22.808	1.00	18.01	O
ATOM	1219	N	ALA	163	28.462	13.245	24.085	1.00	17.02	N
ATOM	1220	CA	ALA	163	29.340	13.427	25.235	1.00	16.60	C
ATOM	1221	CB	ALA	163	29.872	14.853	25.266	1.00	17.98	C
ATOM	1222	C	ALA	163	28.547	13.130	26.505	1.00	17.75	C
ATOM	1223	O	ALA	163	27.375	12.760	26.436	1.00	17.30	O
ATOM	1224	N	SER	164	29.184	13.296	27.659	1.00	18.21	N
ATOM	1225	CA	SER	164	28.531	13.030	28.937	1.00	19.18	C
ATOM	1226	CB	SER	164	29.482	13.346	30.092	1.00	19.27	C
ATOM	1227	OG	SER	164	29.779	14.731	30.134	1.00	22.72	O
ATOM	1228	C	SER	164	27.258	13.851	29.098	1.00	18.32	C
ATOM	1229	O	SER	164	26.302	13.413	29.736	1.00	18.07	O
ATOM	1230	N	ALA	165	27.261	15.048	28.523	1.00	18.81	N
ATOM	1231	CA	ALA	165	26.112	15.942	28.598	1.00	19.37	C
ATOM	1232	CB	ALA	165	26.185	16.783	29.875	1.00	19.73	C
ATOM	1233	C	ALA	165	26.071	16.845	27.368	1.00	19.88	C
ATOM	1234	O	ALA	165	27.100	17.111	26.743	1.00	19.89	O
ATOM	1235	N	PRO	166	24.875	17.336	27.008	1.00	20.73	N
ATOM	1236	CD	PRO	166	23.616	17.149	27.746	1.00	21.62	C
ATOM	1237	CA	PRO	166	24.670	18.212	25.850	1.00	21.75	C
ATOM	1238	CB	PRO	166	23.205	18.644	25.993	1.00	20.32	C
ATOM	1239	CG	PRO	166	22.903	18.425	27.448	1.00	23.22	C
ATOM	1240	C	PRO	166	25.629	19.395	25.708	1.00	21.37	C
ATOM	1241	O	PRO	166	25.885	19.854	24.595	1.00	22.76	O
ATOM	1242	N	GLY	167	26.152	19.892	26.825	1.00	21.72	N
ATOM	1243	CA	GLY	167	27.087	21.003	26.772	1.00	21.58	C
ATOM	1244	C	GLY	167	26.538	22.345	26.318	1.00	20.89	C
ATOM	1245	O	GLY	167	25.353	22.634	26.471	1.00	21.11	O
ATOM	1246	N	THR	168	27.416	23.170	25.756	1.00	21.10	N
ATOM	1247	CA	THR	168	27.043	24.500	25.282	1.00	20.23	C
ATOM	1248	CB	THR	168	28.244	25.205	24.624	1.00	22.09	C
ATOM	1249	OG1	THR	168	29.359	25.190	25.524	1.00	24.54	O
ATOM	1250	CG2	THR	168	27.895	26.646	24.290	1.00	23.22	C
ATOM	1251	C	THR	168	25.900	24.458	24.267	1.00	18.39	C
ATOM	1252	O	THR	168	26.019	23.830	23.217	1.00	19.21	O

ATOM	1253	N	ILE	169	24.795	25.129	24.583	1.00	15.65	N
ATOM	1254	CA	ILE	169	23.645	25.161	23.683	1.00	12.80	C
ATOM	1255	CB	ILE	169	22.329	25.453	24.441	1.00	11.16	C
ATOM	1256	CG2	ILE	169	21.144	25.276	23.499	1.00	11.44	C
ATOM	1257	CG1	ILE	169	22.192	24.522	25.654	1.00	12.76	C
ATOM	1258	CD1	ILE	169	22.273	23.054	25.329	1.00	13.05	C
ATOM	1259	C	ILE	169	23.853	26.253	22.636	1.00	11.83	C
ATOM	1260	O	ILE	169	24.113	27.409	22.967	1.00	12.18	O
ATOM	1261	N	PRO	170	23.733	25.897	21.350	1.00	10.39	N
ATOM	1262	CD	PRO	170	23.501	24.544	20.813	1.00	10.35	C
ATOM	1263	CA	PRO	170	23.918	26.859	20.265	1.00	11.05	C
ATOM	1264	CB	PRO	170	24.188	25.958	19.069	1.00	12.23	C
ATOM	1265	CG	PRO	170	23.272	24.812	19.337	1.00	13.12	C
ATOM	1266	C	PRO	170	22.742	27.793	20.003	1.00	10.49	C
ATOM	1267	O	PRO	170	21.627	27.577	20.485	1.00	10.29	O
ATOM	1268	N	GLY	171	23.029	28.838	19.233	1.00	10.02	N
ATOM	1269	CA	GLY	171	22.031	29.805	18.811	1.00	9.27	C
ATOM	1270	C	GLY	171	21.146	30.511	19.813	1.00	10.07	C
ATOM	1271	O	GLY	171	20.076	30.983	19.445	1.00	10.49	O
ATOM	1272	N	GLY	172	21.571	30.599	21.066	1.00	9.91	N
ATOM	1273	CA	GLY	172	20.751	31.283	22.047	1.00	9.58	C
ATOM	1274	C	GLY	172	19.512	30.526	22.489	1.00	9.15	C
ATOM	1275	O	GLY	172	18.619	31.108	23.102	1.00	8.94	O
ATOM	1276	N	TRP	173	19.433	29.241	22.158	1.00	8.06	N
ATOM	1277	CA	TRP	173	18.302	28.423	22.584	1.00	7.42	C
ATOM	1278	CB	TRP	173	18.313	27.066	21.869	1.00	6.48	C
ATOM	1279	CG	TRP	173	17.396	26.952	20.684	1.00	5.85	C
ATOM	1280	CD2	TRP	173	17.780	26.948	19.305	1.00	5.61	C
ATOM	1281	CE2	TRP	173	16.606	26.745	18.543	1.00	5.53	C
ATOM	1282	CE3	TRP	173	19.002	27.094	18.638	1.00	6.38	C
ATOM	1283	CD1	TRP	173	16.040	26.763	20.705	1.00	6.97	C
ATOM	1284	NE1	TRP	173	15.560	26.635	19.421	1.00	7.17	N
ATOM	1285	CZ2	TRP	173	16.621	26.683	17.147	1.00	5.28	C
ATOM	1286	CZ3	TRP	173	19.018	27.031	17.249	1.00	6.26	C
ATOM	1287	CH2	TRP	173	17.832	26.826	16.520	1.00	6.93	C
ATOM	1288	C	TRP	173	18.519	28.190	24.075	1.00	7.41	C
ATOM	1289	O	TRP	173	19.640	27.937	24.504	1.00	8.38	O
ATOM	1290	N	PRO	174	17.453	28.279	24.882	1.00	8.60	N
ATOM	1291	CD	PRO	174	16.088	28.686	24.517	1.00	10.87	C
ATOM	1292	CA	PRO	174	17.566	28.067	26.329	1.00	10.68	C
ATOM	1293	CB	PRO	174	16.198	28.505	26.860	1.00	12.24	C
ATOM	1294	CG	PRO	174	15.628	29.356	25.771	1.00	14.15	C
ATOM	1295	C	PRO	174	17.825	26.590	26.626	1.00	9.64	C
ATOM	1296	O	PRO	174	18.433	26.238	27.635	1.00	9.34	O
ATOM	1297	N	TYR	175	17.348	25.727	25.739	1.00	9.94	N
ATOM	1298	CA	TYR	175	17.525	24.294	25.918	1.00	10.06	C
ATOM	1299	CB	TYR	175	16.602	23.791	27.028	1.00	10.63	C
ATOM	1300	CG	TYR	175	15.147	24.149	26.821	1.00	13.26	C
ATOM	1301	CD1	TYR	175	14.356	23.454	25.905	1.00	12.70	C
ATOM	1302	CE1	TYR	175	13.022	23.806	25.692	1.00	16.48	C
ATOM	1303	CD2	TYR	175	14.568	25.206	27.522	1.00	14.82	C
ATOM	1304	CE2	TYR	175	13.243	25.567	27.317	1.00	16.33	C
ATOM	1305	CZ	TYR	175	12.475	24.866	26.403	1.00	18.00	C
ATOM	1306	OH	TYR	175	11.164	25.226	26.204	1.00	20.34	O
ATOM	1307	C	TYR	175	17.221	23.539	24.640	1.00	10.06	C
ATOM	1308	O	TYR	175	16.542	24.051	23.747	1.00	10.51	O
ATOM	1309	N	GLN	176	17.733	22.319	24.556	1.00	9.10	N

ATOM	1310	CA	GLN	176	17.472	21.489	23.396	1.00	7.61	C
ATOM	1311	CB	GLN	176	18.638	20.521	23.150	1.00	7.95	C
ATOM	1312	CG	GLN	176	18.705	19.288	24.068	1.00	8.97	C
ATOM	1313	CD	GLN	176	19.062	19.607	25.512	1.00	9.17	C
ATOM	1314	OE1	GLN	176	19.639	20.650	25.809	1.00	10.36	O
ATOM	1315	NE2	GLN	176	18.739	18.686	26.417	1.00	8.81	N
ATOM	1316	C	GLN	176	16.196	20.716	23.715	1.00	8.21	C
ATOM	1317	O	GLN	176	15.959	20.353	24.868	1.00	10.01	O
ATOM	1318	N	THR	177	15.358	20.493	22.710	1.00	6.17	N
ATOM	1319	CA	THR	177	14.129	19.738	22.922	1.00	7.56	C
ATOM	1320	CB	THR	177	13.071	20.095	21.865	1.00	7.97	C
ATOM	1321	OG1	THR	177	12.628	21.442	22.086	1.00	9.05	O
ATOM	1322	CG2	THR	177	11.878	19.157	21.957	1.00	9.45	C
ATOM	1323	C	THR	177	14.478	18.255	22.858	1.00	7.05	C
ATOM	1324	O	THR	177	13.906	17.434	23.572	1.00	7.04	O
ATOM	1325	N	ILE	178	15.433	17.922	21.999	1.00	5.91	N
ATOM	1326	CA	ILE	178	15.900	16.551	21.874	1.00	6.07	C
ATOM	1327	CB	ILE	178	15.347	15.855	20.613	1.00	6.10	C
ATOM	1328	CG2	ILE	178	15.967	14.467	20.481	1.00	6.70	C
ATOM	1329	CG1	ILE	178	13.824	15.734	20.710	1.00	8.28	C
ATOM	1330	CD1	ILE	178	13.173	15.148	19.465	1.00	5.97	C
ATOM	1331	C	ILE	178	17.414	16.583	21.792	1.00	7.03	C
ATOM	1332	O	ILE	178	17.991	17.451	21.135	1.00	6.87	O
ATOM	1333	N	TRP	179	18.051	15.642	22.478	1.00	6.05	N
ATOM	1334	CA	TRP	179	19.504	15.538	22.487	1.00	7.11	C
ATOM	1335	CB	TRP	179	20.018	15.622	23.935	1.00	7.18	C
ATOM	1336	CG	TRP	179	21.479	15.305	24.121	1.00	9.15	C
ATOM	1337	CD2	TRP	179	22.073	14.622	25.236	1.00	9.92	C
ATOM	1338	CE2	TRP	179	23.467	14.588	25.012	1.00	11.00	C
ATOM	1339	CE3	TRP	179	21.561	14.038	26.403	1.00	9.60	C
ATOM	1340	CD1	TRP	179	22.509	15.647	23.293	1.00	9.27	C
ATOM	1341	NE1	TRP	179	23.705	15.220	23.820	1.00	10.47	N
ATOM	1342	CZ2	TRP	179	24.360	13.991	25.912	1.00	10.41	C
ATOM	1343	CZ3	TRP	179	22.450	13.444	27.300	1.00	12.15	C
ATOM	1344	CH2	TRP	179	23.833	13.426	27.046	1.00	10.95	C
ATOM	1345	C	TRP	179	19.920	14.214	21.854	1.00	7.30	C
ATOM	1346	O	TRP	179	19.551	13.148	22.344	1.00	8.07	O
ATOM	1347	N	GLN	180	20.648	14.279	20.744	1.00	6.66	N
ATOM	1348	CA	GLN	180	21.130	13.057	20.109	1.00	7.83	C
ATOM	1349	CB	GLN	180	21.406	13.284	18.623	1.00	8.35	C
ATOM	1350	CG	GLN	180	21.766	12.012	17.875	1.00	9.75	C
ATOM	1351	CD	GLN	180	21.972	12.259	16.399	1.00	10.36	C
ATOM	1352	OE1	GLN	180	21.158	11.853	15.568	1.00	13.74	O
ATOM	1353	NE2	GLN	180	23.053	12.942	16.064	1.00	10.71	N
ATOM	1354	C	GLN	180	22.426	12.782	20.862	1.00	8.71	C
ATOM	1355	O	GLN	180	23.443	13.433	20.622	1.00	10.16	O
ATOM	1356	N	ASN	181	22.378	11.822	21.780	1.00	8.78	N
ATOM	1357	CA	ASN	181	23.522	11.511	22.631	1.00	10.39	C
ATOM	1358	CB	ASN	181	23.012	11.169	24.035	1.00	11.25	C
ATOM	1359	CG	ASN	181	22.144	9.926	24.057	1.00	12.35	C
ATOM	1360	OD1	ASN	181	21.295	9.727	23.187	1.00	10.39	O
ATOM	1361	ND2	ASN	181	22.345	9.088	25.066	1.00	13.76	N
ATOM	1362	C	ASN	181	24.523	10.451	22.178	1.00	12.01	C
ATOM	1363	O	ASN	181	25.510	10.203	22.873	1.00	13.55	O
ATOM	1364	N	SER	182	24.283	9.825	21.032	1.00	11.93	N
ATOM	1365	CA	SER	182	25.211	8.817	20.519	1.00	14.49	C
ATOM	1366	CB	SER	182	25.264	7.604	21.447	1.00	15.25	C

ATOM	1367	OG	SER	182	24.228	6.692	21.126	1.00	18.01	O
ATOM	1368	C	SER	182	24.787	8.352	19.136	1.00	15.59	C
ATOM	1369	O	SER	182	23.637	8.536	18.738	1.00	14.35	O
ATOM	1370	N	ASP	183	25.722	7.752	18.406	1.00	16.80	N
ATOM	1371	CA	ASP	183	25.432	7.244	17.072	1.00	19.42	C
ATOM	1372	CB	ASP	183	26.473	7.735	16.063	1.00	21.43	C
ATOM	1373	CG	ASP	183	27.857	7.176	16.332	1.00	22.77	C
ATOM	1374	OD1	ASP	183	28.718	7.264	15.430	1.00	25.35	O
ATOM	1375	OD2	ASP	183	28.088	6.653	17.442	1.00	23.00	O
ATOM	1376	C	ASP	183	25.448	5.724	17.101	1.00	19.33	C
ATOM	1377	O	ASP	183	25.685	5.078	16.083	1.00	20.36	O
ATOM	1378	N	ALA	184	25.192	5.155	18.274	1.00	19.72	N
ATOM	1379	CA	ALA	184	25.201	3.709	18.417	1.00	20.11	C
ATOM	1380	CB	ALA	184	26.516	3.264	19.051	1.00	21.22	C
ATOM	1381	C	ALA	184	24.027	3.185	19.234	1.00	19.11	C
ATOM	1382	O	ALA	184	24.221	2.537	20.263	1.00	21.15	O
ATOM	1383	N	TYR	185	22.808	3.464	18.785	1.00	16.85	N
ATOM	1384	CA	TYR	185	21.642	2.971	19.503	1.00	14.36	C
ATOM	1385	CB	TYR	185	20.357	3.593	18.955	1.00	14.56	C
ATOM	1386	CG	TYR	185	19.138	3.216	19.762	1.00	12.76	C
ATOM	1387	CD1	TYR	185	19.045	3.545	21.115	1.00	13.24	C
ATOM	1388	CE1	TYR	185	17.943	3.161	21.873	1.00	12.23	C
ATOM	1389	CD2	TYR	185	18.096	2.495	19.187	1.00	11.65	C
ATOM	1390	CE2	TYR	185	16.995	2.106	19.933	1.00	12.15	C
ATOM	1391	CZ	TYR	185	16.924	2.439	21.275	1.00	11.28	C
ATOM	1392	OH	TYR	185	15.842	2.028	22.013	1.00	13.26	O
ATOM	1393	C	TYR	185	21.617	1.452	19.329	1.00	14.60	C
ATOM	1394	O	TYR	185	21.915	0.941	18.252	1.00	12.99	O
ATOM	1395	N	ALA	186	21.262	0.742	20.395	1.00	15.24	N
ATOM	1396	CA	ALA	186	21.229	-0.719	20.393	1.00	14.91	C
ATOM	1397	CB	ALA	186	20.713	-1.214	21.735	1.00	16.46	C
ATOM	1398	C	ALA	186	20.441	-1.382	19.265	1.00	15.60	C
ATOM	1399	O	ALA	186	20.764	-2.498	18.853	1.00	14.82	O
ATOM	1400	N	TYR	187	19.416	-0.708	18.757	1.00	14.40	N
ATOM	1401	CA	TYR	187	18.601	-1.295	17.702	1.00	14.33	C
ATOM	1402	CB	TYR	187	17.131	-1.261	18.124	1.00	15.55	C
ATOM	1403	CG	TYR	187	16.876	-2.175	19.299	1.00	17.04	C
ATOM	1404	CD1	TYR	187	16.685	-3.544	19.112	1.00	17.83	C
ATOM	1405	CE1	TYR	187	16.553	-4.408	20.195	1.00	18.38	C
ATOM	1406	CD2	TYR	187	16.925	-1.690	20.606	1.00	17.84	C
ATOM	1407	CE2	TYR	187	16.798	-2.546	21.695	1.00	18.41	C
ATOM	1408	CZ	TYR	187	16.613	-3.901	21.483	1.00	18.65	C
ATOM	1409	OH	TYR	187	16.507	-4.749	22.558	1.00	20.61	O
ATOM	1410	C	TYR	187	18.794	-0.663	16.335	1.00	14.05	C
ATOM	1411	O	TYR	187	18.009	-0.895	15.414	1.00	14.48	O
ATOM	1412	N	GLY	188	19.860	0.121	16.206	1.00	12.58	N
ATOM	1413	CA	GLY	188	20.163	0.765	14.943	1.00	13.08	C
ATOM	1414	C	GLY	188	20.042	2.273	14.983	1.00	11.36	C
ATOM	1415	O	GLY	188	19.249	2.822	15.747	1.00	13.36	O
ATOM	1416	N	GLY	189	20.842	2.945	14.162	1.00	11.74	N
ATOM	1417	CA	GLY	189	20.797	4.393	14.104	1.00	8.97	C
ATOM	1418	C	GLY	189	21.450	5.112	15.267	1.00	11.02	C
ATOM	1419	O	GLY	189	22.360	4.587	15.911	1.00	9.86	O
ATOM	1420	N	ASP	190	20.972	6.326	15.534	1.00	8.97	N
ATOM	1421	CA	ASP	190	21.509	7.151	16.609	1.00	9.47	C
ATOM	1422	CB	ASP	190	21.735	8.578	16.106	1.00	11.54	C
ATOM	1423	CG	ASP	190	22.506	8.622	14.801	1.00	13.97	C

ATOM	1424	OD1	ASP	190	21.960	9.140	13.800	1.00	16.61	O
ATOM	1425	OD2	ASP	190	23.654	8.138	14.776	1.00	16.17	O
ATOM	1426	C	ASP	190	20.559	7.192	17.800	1.00	9.92	C
ATOM	1427	O	ASP	190	19.348	7.041	17.640	1.00	9.11	O
ATOM	1428	N	SER	191	21.121	7.410	18.987	1.00	8.92	N
ATOM	1429	CA	SER	191	20.345	7.491	20.222	1.00	9.37	C
ATOM	1430	CB	SER	191	21.197	7.024	21.408	1.00	9.36	C
ATOM	1431	OG	SER	191	20.538	7.256	22.642	1.00	10.07	O
ATOM	1432	C	SER	191	19.880	8.926	20.461	1.00	9.81	C
ATOM	1433	O	SER	191	20.639	9.874	20.262	1.00	10.42	O
ATOM	1434	N	ASN	192	18.628	9.075	20.884	1.00	8.92	N
ATOM	1435	CA	ASN	192	18.055	10.390	21.149	1.00	9.19	C
ATOM	1436	CB	ASN	192	17.044	10.756	20.056	1.00	9.32	C
ATOM	1437	CG	ASN	192	17.695	10.991	18.712	1.00	10.06	C
ATOM	1438	OD1	ASN	192	18.395	11.982	18.513	1.00	9.64	O
ATOM	1439	ND2	ASN	192	17.466	10.078	17.777	1.00	8.32	N
ATOM	1440	C	ASN	192	17.355	10.428	22.500	1.00	8.86	C
ATOM	1441	O	ASN	192	16.744	9.447	22.926	1.00	10.03	O
ATOM	1442	N	ILE	193	17.443	11.573	23.168	1.00	7.63	N
ATOM	1443	CA	ILE	193	16.804	11.756	24.460	1.00	7.90	C
ATOM	1444	CB	ILE	193	17.838	11.944	25.591	1.00	8.75	C
ATOM	1445	CG2	ILE	193	17.115	12.172	26.917	1.00	10.46	C
ATOM	1446	CG1	ILE	193	18.755	10.723	25.680	1.00	10.05	C
ATOM	1447	CD1	ILE	193	18.064	9.456	26.123	1.00	14.52	C
ATOM	1448	C	ILE	193	15.929	12.998	24.412	1.00	7.20	C
ATOM	1449	O	ILE	193	16.424	14.108	24.210	1.00	6.15	O
ATOM	1450	N	PHE	194	14.627	12.804	24.589	1.00	6.54	N
ATOM	1451	CA	PHE	194	13.691	13.918	24.591	1.00	7.54	C
ATOM	1452	CB	PHE	194	12.262	13.433	24.349	1.00	5.94	C
ATOM	1453	CG	PHE	194	11.226	14.502	24.538	1.00	7.78	C
ATOM	1454	CD1	PHE	194	11.077	15.519	23.604	1.00	7.42	C
ATOM	1455	CD2	PHE	194	10.417	14.507	25.669	1.00	7.05	C
ATOM	1456	CE1	PHE	194	10.136	16.528	23.792	1.00	7.97	C
ATOM	1457	CE2	PHE	194	9.474	15.509	25.868	1.00	8.42	C
ATOM	1458	CZ	PHE	194	9.332	16.524	24.927	1.00	7.68	C
ATOM	1459	C	PHE	194	13.778	14.580	25.955	1.00	7.81	C
ATOM	1460	O	PHE	194	13.699	13.915	26.993	1.00	7.96	O
ATOM	1461	N	ASN	195	13.935	15.896	25.940	1.00	8.70	N
ATOM	1462	CA	ASN	195	14.066	16.686	27.154	1.00	9.33	C
ATOM	1463	CB	ASN	195	14.829	17.967	26.816	1.00	8.61	C
ATOM	1464	CG	ASN	195	15.088	18.834	28.024	1.00	10.68	C
ATOM	1465	OD1	ASN	195	15.003	18.380	29.163	1.00	11.69	O
ATOM	1466	ND2	ASN	195	15.434	20.089	27.778	1.00	7.83	N
ATOM	1467	C	ASN	195	12.705	17.011	27.763	1.00	9.97	C
ATOM	1468	O	ASN	195	12.222	18.137	27.668	1.00	10.45	O
ATOM	1469	N	GLY	196	12.092	16.018	28.395	1.00	10.73	N
ATOM	1470	CA	GLY	196	10.791	16.232	28.997	1.00	11.14	C
ATOM	1471	C	GLY	196	10.095	14.936	29.349	1.00	11.58	C
ATOM	1472	O	GLY	196	10.625	13.854	29.113	1.00	11.30	O
ATOM	1473	N	SER	197	8.897	15.050	29.910	1.00	10.77	N
ATOM	1474	CA	SER	197	8.122	13.886	30.313	1.00	11.15	C
ATOM	1475	CB	SER	197	7.077	14.294	31.347	1.00	11.92	C
ATOM	1476	OG	SER	197	6.081	15.095	30.736	1.00	14.00	O
ATOM	1477	C	SER	197	7.411	13.253	29.131	1.00	12.14	C
ATOM	1478	O	SER	197	7.359	13.826	28.040	1.00	11.00	O
ATOM	1479	N	ALA	198	6.854	12.068	29.359	1.00	11.92	N
ATOM	1480	CA	ALA	198	6.124	11.357	28.319	1.00	13.84	C

ATOM	1481	CB	ALA	198	5.613	10.027	28.856	1.00	15.24	C
ATOM	1482	C	ALA	198	4.959	12.224	27.850	1.00	14.52	C
ATOM	1483	O	ALA	198	4.638	12.254	26.662	1.00	14.90	O
ATOM	1484	N	ASP	199	4.325	12.925	28.789	1.00	15.41	N
ATOM	1485	CA	ASP	199	3.211	13.801	28.447	1.00	16.57	C
ATOM	1486	CB	ASP	199	2.530	14.342	29.708	1.00	19.57	C
ATOM	1487	CG	ASP	199	1.692	13.295	30.412	1.00	22.69	C
ATOM	1488	OD1	ASP	199	0.932	12.580	29.724	1.00	24.79	O
ATOM	1489	OD2	ASP	199	1.779	13.195	31.654	1.00	25.84	O
ATOM	1490	C	ASP	199	3.701	14.963	27.594	1.00	15.05	C
ATOM	1491	O	ASP	199	3.029	15.372	26.648	1.00	15.50	O
ATOM	1492	N	ASN	200	4.867	15.501	27.943	1.00	13.31	N
ATOM	1493	CA	ASN	200	5.458	16.604	27.191	1.00	12.96	C
ATOM	1494	CB	ASN	200	6.763	17.065	27.842	1.00	15.71	C
ATOM	1495	CG	ASN	200	6.538	17.867	29.106	1.00	20.15	C
ATOM	1496	OD1	ASN	200	7.485	18.179	29.832	1.00	23.55	O
ATOM	1497	ND2	ASN	200	5.285	18.215	29.372	1.00	20.48	N
ATOM	1498	C	ASN	200	5.748	16.145	25.764	1.00	11.17	C
ATOM	1499	O	ASN	200	5.566	16.903	24.810	1.00	9.87	O
ATOM	1500	N	LEU	201	6.213	14.907	25.619	1.00	9.90	N
ATOM	1501	CA	LEU	201	6.509	14.380	24.294	1.00	10.20	C
ATOM	1502	CB	LEU	201	7.188	13.011	24.392	1.00	10.41	C
ATOM	1503	CG	LEU	201	7.492	12.314	23.059	1.00	11.40	C
ATOM	1504	CD1	LEU	201	8.411	13.181	22.200	1.00	9.56	C
ATOM	1505	CD2	LEU	201	8.139	10.972	23.335	1.00	10.39	C
ATOM	1506	C	LEU	201	5.211	14.267	23.505	1.00	10.79	C
ATOM	1507	O	LEU	201	5.152	14.640	22.336	1.00	11.58	O
ATOM	1508	N	LYS	202	4.162	13.760	24.147	1.00	10.80	N
ATOM	1509	CA	LYS	202	2.881	13.631	23.466	1.00	12.45	C
ATOM	1510	CB	LYS	202	1.832	13.003	24.390	1.00	12.57	C
ATOM	1511	CG	LYS	202	2.060	11.519	24.652	1.00	17.62	C
ATOM	1512	CD	LYS	202	0.882	10.879	25.383	1.00	20.81	C
ATOM	1513	CE	LYS	202	0.705	11.455	26.781	1.00	23.61	C
ATOM	1514	NZ	LYS	202	-0.421	10.815	27.512	1.00	25.27	N
ATOM	1515	C	LYS	202	2.402	15.001	22.999	1.00	12.16	C
ATOM	1516	O	LYS	202	1.842	15.130	21.912	1.00	13.56	O
ATOM	1517	N	LYS	203	2.630	16.017	23.827	1.00	12.12	N
ATOM	1518	CA	LYS	203	2.228	17.385	23.510	1.00	12.76	C
ATOM	1519	CB	LYS	203	2.480	18.300	24.714	1.00	14.64	C
ATOM	1520	CG	LYS	203	2.028	19.747	24.518	1.00	19.78	C
ATOM	1521	CD	LYS	203	3.202	20.727	24.536	1.00	22.15	C
ATOM	1522	CE	LYS	203	4.116	20.534	23.334	1.00	23.39	C
ATOM	1523	NZ	LYS	203	5.242	21.510	23.294	1.00	24.39	N
ATOM	1524	C	LYS	203	2.988	17.907	22.295	1.00	11.97	C
ATOM	1525	O	LYS	203	2.451	18.684	21.504	1.00	10.61	O
ATOM	1526	N	LEU	204	4.243	17.491	22.152	1.00	10.43	N
ATOM	1527	CA	LEU	204	5.043	17.920	21.007	1.00	8.65	C
ATOM	1528	CB	LEU	204	6.487	17.421	21.132	1.00	9.34	C
ATOM	1529	CG	LEU	204	7.409	17.640	19.921	1.00	7.52	C
ATOM	1530	CD1	LEU	204	7.517	19.127	19.591	1.00	9.00	C
ATOM	1531	CD2	LEU	204	8.785	17.061	20.224	1.00	8.89	C
ATOM	1532	C	LEU	204	4.409	17.341	19.748	1.00	9.51	C
ATOM	1533	O	LEU	204	4.317	18.009	18.717	1.00	8.83	O
ATOM	1534	N	ALA	205	3.966	16.092	19.847	1.00	8.78	N
ATOM	1535	CA	ALA	205	3.343	15.408	18.723	1.00	9.98	C
ATOM	1536	CB	ALA	205	3.272	13.908	19.002	1.00	10.96	C
ATOM	1537	C	ALA	205	1.950	15.939	18.391	1.00	9.50	C

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ATOM   1538  O    ALA   205          1.636   16.172   17.226   1.00   9.67              O
ATOM   1539  N    THR   206          1.117   16.130   19.412   1.00  11.82              N
ATOM   1540  CA   THR   206         -0.249   16.607   19.201   1.00  11.95              C
ATOM   1541  CB   THR   206         -1.150   16.325   20.425   1.00  11.66              C
ATOM   1542  OG1  THR   206         -0.679   17.082   21.545   1.00  11.60              O
ATOM   1543  CG2  THR   206         -1.137   14.846   20.776   1.00  11.03              C
ATOM   1544  C    THR   206         -0.353   18.096   18.917   1.00  13.48              C
ATOM   1545  O    THR   206         -1.297   18.540   18.261   1.00  13.75              O
ATOM   1546  N    GLY   207          0.608   18.864   19.418   1.00  13.80              N
ATOM   1547  CA   GLY   207          0.575   20.301   19.223   1.00  17.18              C
ATOM   1548  C    GLY   207         -0.353   20.926   20.250   1.00  19.03              C
ATOM   1549  O    GLY   207         -0.907   20.172   21.078   1.00  20.22              O
ATOM   1550  OT   GLY   207         -0.532   22.161   20.234   1.00  22.71              O
END
```

```
HEADER     LYSOZYME CH                      31-Mar-03   XXXX
TITLE      X-RAY STUDY OF CHALAROPSIS LYSOZYME COMPLEXED WITH GLUCOSAMINE
COMPND     MOL_ID: 1;
COMPND     2 MOLECULE: LYSOZYME CH
COMPND     3 CHAIN: NULL;
COMPND     4 ENGINEERED: NO
SOURCE     MOL_ID: 1;
SOURCE     2 ORGANISM_SCIENTIFIC: CHALAROPSIS SPECIES;
SOURCE     3 ORGANISM_COMMON: FUNGI;
KEYWDS     CHALAROPSIS SP. LYSOZYME
EXPDTA     X-RAY DIFFRACTION
AUTHOR     D.C.CARTER, Z.WANG ET. AL.
REVDAT   1    31-Mar-03          0
JRNL        AUTH    Z.WANG
JRNL        AUTH  2 D.C.CARTER
JRNL        TITL
JRNL        REF
JRNL        REF
JRNL        REFN    ASTM ??????  ?? ISSN 00??-????                    00?
REMARK   1 REFERENCE 1
REMARK   1
REMARK   1
REMARK   1
REMARK   1
REMARK   1
REMARK   2
REMARK   2 RESOLUTION. 1.55 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3    PROGRAM     : CNX 2000.1
REMARK   3    AUTHORS     : Brunger, Adams, Clore, Delano,
REMARK   3                  Gros, Grosse-Kunstleve, Jiang,
REMARK   3                  Kuszewski, Nilges, Pannu, Read,
REMARK   3                  Rice, Simonson, Warren
REMARK   3                    and
REMARK   3                  Molecular Simulations Inc.,
REMARK   3                  (Badger, Berard, Kumar, Szalma,
REMARK   3                   Yip).
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 1.55
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 32.26
REMARK   3   DATA CUTOFF            (SIGMA(F)) : 0.0
REMARK   3   DATA CUTOFF HIGH        (ABS(F)) :   265465.24
REMARK   3   DATA CUTOFF LOW         (ABS(F)) :        0.000000
REMARK   3   COMPLETENESS (WORKING+TEST)   (%) : 95.1
REMARK   3   NUMBER OF REFLECTIONS           : 23820
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE            (WORKING SET) : 0.195
REMARK   3   FREE R VALUE                     : 0.226
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 4.9
REMARK   3   FREE R VALUE TEST SET COUNT      : 1157
REMARK   3   ESTIMATED ERROR OF FREE R VALUE  : 0.007
REMARK   3
```

```
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED              :      6
REMARK   3   BIN RESOLUTION RANGE HIGH       (A) :   1.55
REMARK   3   BIN RESOLUTION RANGE LOW        (A) :   1.65
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :   89.9
REMARK   3   REFLECTIONS IN BIN     (WORKING SET) :   3504
REMARK   3   BIN R VALUE           (WORKING SET) :   0.236
REMARK   3   BIN FREE R VALUE                     :   0.275
REMARK   3   BIN FREE R VALUE TEST SET SIZE  (%) :    4.8
REMARK   3   BIN FREE R VALUE TEST SET COUNT      :     176
REMARK   3   ESTIMATED ERROR OF BIN FREE R VALUE :   0.021
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   PROTEIN ATOMS               :   1882
REMARK   3   NUCLEIC ACID ATOMS          :      0
REMARK   3   HETEROGEN ATOMS             :      0
REMARK   3   SOLVENT ATOMS               :    322
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) :  15.4
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  15.2
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :   1.88
REMARK   3    B22 (A**2) :  -1.62
REMARK   3    B33 (A**2) :  -0.26
REMARK   3    B12 (A**2) :   0.00
REMARK   3    B13 (A**2) :   0.00
REMARK   3    B23 (A**2) :   0.00
REMARK   3
REMARK   3  BULK SOLVENT MODELING.
REMARK   3   METHOD USED : FLAT MODEL
REMARK   3   KSOL        : 0.387401
REMARK   3   BSOL        : 51.6917 (A**2)
REMARK   3
REMARK   3  ESTIMATED COORDINATE ERROR.
REMARK   3   ESD FROM LUZZATI PLOT        (A) :  0.17
REMARK   3   ESD FROM SIGMAA             (A) :  0.10
REMARK   3   LOW RESOLUTION CUTOFF       (A) :  5.00
REMARK   3
REMARK   3  CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3   ESD FROM C-V LUZZATI PLOT    (A) :  0.20
REMARK   3   ESD FROM C-V SIGMAA         (A) :  0.13
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3   BOND LENGTHS                 (A) :  0.005
REMARK   3   BOND ANGLES            (DEGREES) :  1.6
REMARK   3   DIHEDRAL ANGLES        (DEGREES) :  23.2
REMARK   3   IMPROPER ANGLES        (DEGREES) :  0.79
REMARK   3
REMARK   3  ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS    SIGMA
REMARK   3   MAIN-CHAIN BOND               (A**2) :  0.96 ;  1.50
REMARK   3   MAIN-CHAIN ANGLE              (A**2) :  1.39 ;  2.00
REMARK   3   SIDE-CHAIN BOND               (A**2) :  1.61 ;  2.00
REMARK   3   SIDE-CHAIN ANGLE              (A**2) :  2.07 ;  2.50
REMARK   3
```

```
REMARK   3  NCS MODEL : NONE
REMARK   3
REMARK   3  NCS RESTRAINTS.                               RMS     SIGMA/WEIGHT
REMARK   3   GROUP  1  POSITIONAL              (A)  : NULL  ;  NULL
REMARK   3   GROUP  1  B-FACTOR             (A**2) : NULL  ;  NULL
REMARK   3
REMARK   3  PARAMETER FILE   1  : MSI_CNX_TOPPAR/protein_rep.param
REMARK   3  PARAMETER FILE   2  : MSI_CNX_TOPPAR/water.param
REMARK   3  PARAMETER FILE   3  : MSI_CNX_TOPPAR/ion.param
REMARK   3  TOPOLOGY FILE   1  : MSI_CNX_TOPPAR/protein.top
REMARK   3  TOPOLOGY FILE   2  : MSI_CNX_TOPPAR/water.top
REMARK   3  TOPOLOGY FILE   3  : MSI_CNX_TOPPAR/ion.top
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS: NULL
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE                : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION        : 2003
REMARK 200  TEMPERATURE           (KELVIN) : 100
REMARK 200  PH                             : 5.0
REMARK 200  NUMBER OF CRYSTALS USED        : 1
REMARK 200
REMARK 200  SYNCHROTRON              (Y/N) : Y
REMARK 200  RADIATION SOURCE               : NSLS/BNL
REMARK 200  BEAMLINE                       : X12C
REMARK 200  X-RAY GENERATOR MODEL          :
REMARK 200  MONOCHROMATIC OR LAUE    (M/L) : M
REMARK 200  WAVELENGTH OR RANGE        (A) : 1.00040
REMARK 200  MONOCHROMATOR                  :
REMARK 200  OPTICS                         :
REMARK 200
REMARK 200  DETECOTR TYPE                  :
REMARK 200  DETECTOR MANUFACTURER          :
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : HKL/DENZO
REMARK 200  DATA SCALING SOFTWARE          : HKL/SCALEPACK
REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS   :
REMARK 200  RESOLUTION RANGE HIGH      (A) :
REMARK 200  RESOLUTION RANGE LOW       (A) :
REMARK 200  REJECTION CRITERIA  (SIGMA(I)) :
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE     (%) :
REMARK 200  DATA REDUNDANCY                :
REMARK 200  R MERGE                    (I) :
REMARK 200  R SYM                      (I) :
REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  :
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE HIGH (A) :
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE LOW  (A) :
REMARK 200  COMPLETENESS FOR SHELL     (%) :
REMARK 200  DATA REDUNDANCY IN SHELL       :
REMARK 200  R MERGE FOR SHELL          (I) :
REMARK 200  R SYM FOR SHELL            (I) :
REMARK 200  <I/SIGMA(I)> FOR SHELL         :
REMARK 200
```

```
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
REMARK 200 SOFTWARE USED:
REMARK 200 STARTING MODEL:
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS    (%):
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA):
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: FREE TEXT GOES HERE.
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 2(1) 2(1) 2(1)
REMARK 290
REMARK 290      SYMOP    SYMMETRY
REMARK 290      NNNMMM    OPERATOR
REMARK 290
REMARK 290       Put symmetry operators here
REMARK 290
REMARK 290      WHERE NNN -> OPERATOR NUMBER
REMARK 290      WHERE MMM -> TRANSLATION VECTOR
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290    SMTRY1    1
REMARK 290    SMTRY2    1
REMARK 290    SMTRY3    1
REMARK 290    SMTRY1    2
REMARK 290    SMTRY2    2
REMARK 290    SMTRY3    2
REMARK 290
REMARK 290 REMARK: NULL
REMARK 999
REMARK 999 SEQUENCE
SEQADV
SEQRES    1    207    THR VAL GLN GLY PHE ASP ILE SER SER TYR GLN PRO SER
SEQRES    2    207    VAL ASN PHE ALA GLY ALA TYR SER ALA GLY ALA ARG PHE
SEQRES    3    207    VAL ILE ILE LYS ALA THR GLU GLY THR SER TYR THR ASN
SEQRES    4    207    PRO SER PHE SER SER GLN TYR THR GLY ALA THR ASN ALA
SEQRES    5    207    GLY PHE ILE ARG GLY GLY TYR HIS PHE ALA HIS PRO GLY
SEQRES    6    207    GLU THR THR GLY ALA ALA GLN ALA ASP TYR PHE ILE ALA
SEQRES    7    207    HIS GLY GLY GLY TRP SER GLY ASP GLY ILE THR LEU PRO
SEQRES    8    207    GLY MET LEU ASP LEU GLU SER GLU GLY SER ASN PRO ALA
SEQRES    9    207    CYS TRP GLY LEU SER ALA ALA SER MET VAL ALA TRP ILE
SEQRES   10    207    LYS ALA PHE SER ASP ARG TYR HIS ALA VAL THR GLY ARG
SEQRES   11    207    TYR PRO MET LEU TYR THR ASN PRO SER TRP TRP SER SER
SEQRES   12    207    CYS THR GLY ASN SER ASN ALA PHE VAL ASN THR ASN PRO
SEQRES   13    207    LEU VAL LEU ALA ARG TYR ALA SER ALA PRO GLY THR ILE
SEQRES   14    207    PRO GLY GLY TRP PRO TYR GLN THR ILE TRP GLN ASN SER
SEQRES   15    207    ASP ALA TYR ALA TYR GLY GLY ASP SER ASN ILE PHE ASN
SEQRES   16    207    GLY SER ALA ASP ASN LEU LYS LYS LEU ALA THR GLY
SSBOND    1 CYS S  105     CYS S   144
CRYST1    33.490    41.290   120.097  90.00    90.00    90.00 P 21 21 21      4
ORIGX1        1.000000  0.000000  0.000000         0.00000
ORIGX2        0.000000  1.000000  0.000000         0.00000
ORIGX3        0.000000  0.000000  1.000000         0.00000
SCALE1        0.029860  0.000000  0.000000         0.00000
```

```
SCALE2        0.000000  0.024219  0.000000      0.00000
SCALE3        0.000000  0.000000  0.008327      0.00000
ATOM     1  CB  THR   1      15.451  11.248  31.580  1.00 13.00           C
ATOM     2  OG1 THR   1      15.992  10.088  32.220  1.00 14.49           O
ATOM     3  CG2 THR   1      16.063  12.500  32.198  1.00 15.74           C
ATOM     4  C   THR   1      13.363  10.006  31.083  1.00  9.79           C
ATOM     5  O   THR   1      12.967   9.059  31.760  1.00 11.75           O
ATOM     6  N   THR   1      13.531  11.280  33.183  1.00 10.93           N
ATOM     7  CA  THR   1      13.923  11.255  31.746  1.00 10.94           C
ATOM     8  N   VAL   2      13.332  10.009  29.756  1.00  9.08           N
ATOM     9  CA  VAL   2      12.810   8.875  29.010  1.00  8.69           C
ATOM    10  CB  VAL   2      11.486   9.241  28.303  1.00  9.21           C
ATOM    11  CG1 VAL   2      10.941   8.031  27.551  1.00  9.43           C
ATOM    12  CG2 VAL   2      10.474   9.734  29.327  1.00 10.15           C
ATOM    13  C   VAL   2      13.826   8.418  27.971  1.00  8.92           C
ATOM    14  O   VAL   2      14.387   9.230  27.234  1.00 10.05           O
ATOM    15  N   GLN   3      14.066   7.112  27.927  1.00  8.28           N
ATOM    16  CA  GLN   3      15.011   6.535  26.979  1.00  8.27           C
ATOM    17  CB  GLN   3      15.451   5.150  27.466  1.00  8.42           C
ATOM    18  CG  GLN   3      16.388   4.410  26.518  1.00  9.26           C
ATOM    19  CD  GLN   3      17.798   4.960  26.539  1.00 10.55           C
ATOM    20  OE1 GLN   3      18.422   5.060  27.598  1.00 11.75           O
ATOM    21  NE2 GLN   3      18.314   5.315  25.367  1.00  8.78           N
ATOM    22  C   GLN   3      14.381   6.404  25.594  1.00  7.86           C
ATOM    23  O   GLN   3      13.180   6.169  25.464  1.00  7.91           O
ATOM    24  N   GLY   4      15.205   6.564  24.564  1.00  8.26           N
ATOM    25  CA  GLY   4      14.733   6.430  23.198  1.00  7.55           C
ATOM    26  C   GLY   4      15.929   6.150  22.311  1.00  8.17           C
ATOM    27  O   GLY   4      17.028   5.910  22.807  1.00  8.96           O
ATOM    28  N   PHE   5      15.722   6.163  21.002  1.00  7.48           N
ATOM    29  CA  PHE   5      16.817   5.945  20.069  1.00  7.15           C
ATOM    30  CB  PHE   5      17.279   4.462  20.066  1.00  8.64           C
ATOM    31  CG  PHE   5      16.275   3.466  19.520  1.00  8.11           C
ATOM    32  CD1 PHE   5      16.647   2.596  18.493  1.00  8.21           C
ATOM    33  CD2 PHE   5      15.007   3.326  20.082  1.00 10.05           C
ATOM    34  CE1 PHE   5      15.777   1.597  18.035  1.00  9.68           C
ATOM    35  CE2 PHE   5      14.130   2.329  19.630  1.00  9.62           C
ATOM    36  CZ  PHE   5      14.519   1.462  18.605  1.00  9.43           C
ATOM    37  C   PHE   5      16.425   6.410  18.678  1.00  7.36           C
ATOM    38  O   PHE   5      15.281   6.808  18.451  1.00  8.78           O
ATOM    39  N   ASP   6      17.385   6.420  17.762  1.00  6.94           N
ATOM    40  CA  ASP   6      17.094   6.819  16.395  1.00  7.70           C
ATOM    41  CB  ASP   6      17.467   8.290  16.130  1.00  6.75           C
ATOM    42  CG  ASP   6      18.919   8.600  16.403  1.00  9.14           C
ATOM    43  OD1 ASP   6      19.234   9.062  17.523  1.00  8.95           O
ATOM    44  OD2 ASP   6      19.748   8.393  15.492  1.00  8.98           O
ATOM    45  C   ASP   6      17.815   5.875  15.454  1.00  8.13           C
ATOM    46  O   ASP   6      18.910   5.389  15.754  1.00  9.04           O
ATOM    47  N   ILE   7      17.184   5.609  14.317  1.00  7.50           N
ATOM    48  CA  ILE   7      17.717   4.666  13.349  1.00  9.57           C
ATOM    49  CB  ILE   7      16.996   3.318  13.495  1.00  7.81           C
ATOM    50  CG2 ILE   7      17.400   2.645  14.803  1.00  9.71           C
ATOM    51  CG1 ILE   7      15.480   3.544  13.459  1.00  9.22           C
ATOM    52  CD1 ILE   7      14.652   2.279  13.608  1.00  9.66           C
ATOM    53  C   ILE   7      17.573   5.128  11.907  1.00 10.30           C
ATOM    54  O   ILE   7      16.861   6.090  11.610  1.00 11.04           O
ATOM    55  N   SER   8      18.263   4.422  11.018  1.00 10.95           N
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ATOM	56	CA	SER	8	18.235	4.715	9.591	1.00	11.34	C
ATOM	57	CB	SER	8	19.491	5.482	9.183	1.00	12.67	C
ATOM	58	OG	SER	8	20.641	4.664	9.315	1.00	15.21	O
ATOM	59	C	SER	8	18.197	3.385	8.853	1.00	11.70	C
ATOM	60	O	SER	8	17.981	2.336	9.462	1.00	10.96	O
ATOM	61	N	SER	9	18.422	3.425	7.544	1.00	11.97	N
ATOM	62	CA	SER	9	18.426	2.207	6.744	1.00	14.11	C
ATOM	63	CB	SER	9	18.626	2.543	5.264	1.00	15.96	C
ATOM	64	OG	SER	9	19.888	3.150	5.047	1.00	17.76	O
ATOM	65	C	SER	9	19.533	1.257	7.204	1.00	13.92	C
ATOM	66	O	SER	9	19.511	0.074	6.877	1.00	14.27	O
ATOM	67	N	TYR	10	20.500	1.773	7.959	1.00	13.99	N
ATOM	68	CA	TYR	10	21.592	0.937	8.445	1.00	14.56	C
ATOM	69	CB	TYR	10	22.746	1.800	8.962	1.00	16.37	C
ATOM	70	CG	TYR	10	23.521	2.502	7.863	1.00	19.77	C
ATOM	71	CD1	TYR	10	23.124	3.752	7.387	1.00	20.76	C
ATOM	72	CE1	TYR	10	23.823	4.388	6.358	1.00	22.15	C
ATOM	73	CD2	TYR	10	24.639	1.903	7.282	1.00	21.55	C
ATOM	74	CE2	TYR	10	25.342	2.529	6.252	1.00	22.82	C
ATOM	75	CZ	TYR	10	24.928	3.770	5.796	1.00	22.12	C
ATOM	76	OH	TYR	10	25.616	4.387	4.775	1.00	23.62	O
ATOM	77	C	TYR	10	21.146	-0.050	9.525	1.00	14.53	C
ATOM	78	O	TYR	10	21.916	-0.924	9.926	1.00	15.08	O
ATOM	79	N	GLN	11	19.906	0.097	9.991	1.00	13.28	N
ATOM	80	CA	GLN	11	19.330	-0.796	11.000	1.00	13.87	C
ATOM	81	CB	GLN	11	19.113	-0.057	12.330	1.00	13.66	C
ATOM	82	CG	GLN	11	20.397	0.328	13.062	1.00	13.62	C
ATOM	83	CD	GLN	11	21.029	1.605	12.544	1.00	13.90	C
ATOM	84	OE1	GLN	11	22.255	1.715	12.463	1.00	17.54	O
ATOM	85	NE2	GLN	11	20.199	2.584	12.209	1.00	11.47	N
ATOM	86	C	GLN	11	17.986	-1.309	10.471	1.00	13.66	C
ATOM	87	O	GLN	11	16.926	-0.971	10.996	1.00	13.68	O
ATOM	88	N	PRO	12	18.020	-2.158	9.431	1.00	14.60	N
ATOM	89	CD	PRO	12	19.233	-2.632	8.738	1.00	15.97	C
ATOM	90	CA	PRO	12	16.818	-2.720	8.810	1.00	14.41	C
ATOM	91	CB	PRO	12	17.339	-3.215	7.465	1.00	15.26	C
ATOM	92	CG	PRO	12	18.692	-3.721	7.828	1.00	14.70	C
ATOM	93	C	PRO	12	16.066	-3.817	9.560	1.00	13.82	C
ATOM	94	O	PRO	12	14.952	-4.167	9.174	1.00	14.30	O
ATOM	95	N	SER	13	16.654	-4.346	10.629	1.00	12.78	N
ATOM	96	CA	SER	13	16.013	-5.430	11.371	1.00	11.84	C
ATOM	97	CB	SER	13	16.747	-6.743	11.088	1.00	12.76	C
ATOM	98	OG	SER	13	16.993	-6.905	9.703	1.00	12.80	O
ATOM	99	C	SER	13	15.971	-5.203	12.879	1.00	11.60	C
ATOM	100	O	SER	13	16.290	-6.105	13.654	1.00	12.61	O
ATOM	101	N	VAL	14	15.558	-4.013	13.295	1.00	10.46	N
ATOM	102	CA	VAL	14	15.493	-3.684	14.714	1.00	11.04	C
ATOM	103	CB	VAL	14	15.190	-2.181	14.916	1.00	9.51	C
ATOM	104	CG1	VAL	14	14.899	-1.892	16.386	1.00	10.98	C
ATOM	105	CG2	VAL	14	16.369	-1.352	14.442	1.00	9.62	C
ATOM	106	C	VAL	14	14.458	-4.490	15.498	1.00	10.73	C
ATOM	107	O	VAL	14	13.330	-4.682	15.052	1.00	11.77	O
ATOM	108	N	ASN	15	14.867	-4.972	16.667	1.00	10.22	N
ATOM	109	CA	ASN	15	13.986	-5.719	17.554	1.00	8.94	C
ATOM	110	CB	ASN	15	14.812	-6.682	18.415	1.00	9.20	C
ATOM	111	CG	ASN	15	13.991	-7.361	19.494	1.00	8.36	C
ATOM	112	OD1	ASN	15	12.780	-7.166	19.590	1.00	10.46	O

ATOM	113	ND2	ASN	15	14.655	-8.169	20.316	1.00	10.66	N
ATOM	114	C	ASN	15	13.309	-4.660	18.426	1.00	9.05	C
ATOM	115	O	ASN	15	13.791	-4.337	19.508	1.00	8.38	O
ATOM	116	N	PHE	16	12.199	-4.113	17.936	1.00	9.87	N
ATOM	117	CA	PHE	16	11.470	-3.065	18.651	1.00	10.57	C
ATOM	118	CB	PHE	16	10.358	-2.504	17.758	1.00	11.26	C
ATOM	119	CG	PHE	16	10.869	-1.680	16.607	1.00	11.88	C
ATOM	120	CD1	PHE	16	11.350	-0.390	16.817	1.00	10.60	C
ATOM	121	CD2	PHE	16	10.909	-2.207	15.318	1.00	9.33	C
ATOM	122	CE1	PHE	16	11.866	0.366	15.763	1.00	11.18	C
ATOM	123	CE2	PHE	16	11.424	-1.461	14.257	1.00	10.88	C
ATOM	124	CZ	PHE	16	11.904	-0.171	14.481	1.00	10.21	C
ATOM	125	C	PHE	16	10.898	-3.495	19.998	1.00	10.48	C
ATOM	126	O	PHE	16	10.914	-2.722	20.957	1.00	9.42	O
ATOM	127	N	ALA	17	10.392	-4.721	20.071	1.00	9.42	N
ATOM	128	CA	ALA	17	9.839	-5.233	21.319	1.00	9.05	C
ATOM	129	CB	ALA	17	9.254	-6.625	21.097	1.00	10.62	C
ATOM	130	C	ALA	17	10.951	-5.285	22.363	1.00	8.63	C
ATOM	131	O	ALA	17	10.734	-4.968	23.532	1.00	10.20	O
ATOM	132	N	GLY	18	12.141	-5.688	21.929	1.00	8.16	N
ATOM	133	CA	GLY	18	13.277	-5.759	22.830	1.00	9.20	C
ATOM	134	C	GLY	18	13.675	-4.374	23.300	1.00	9.94	C
ATOM	135	O	GLY	18	13.944	-4.164	24.486	1.00	10.73	O
ATOM	136	N	ALA	19	13.721	-3.423	22.372	1.00	8.82	N
ATOM	137	CA	ALA	19	14.077	-2.059	22.729	1.00	9.20	C
ATOM	138	CB	ALA	19	14.104	-1.172	21.484	1.00	9.49	C
ATOM	139	C	ALA	19	13.080	-1.514	23.747	1.00	9.47	C
ATOM	140	O	ALA	19	13.469	-0.851	24.710	1.00	9.24	O
ATOM	141	N	TYR	20	11.794	-1.796	23.543	1.00	10.19	N
ATOM	142	CA	TYR	20	10.762	-1.318	24.459	1.00	10.58	C
ATOM	143	CB	TYR	20	9.367	-1.675	23.943	1.00	11.96	C
ATOM	144	CG	TYR	20	8.258	-0.924	24.645	1.00	13.88	C
ATOM	145	CD1	TYR	20	7.837	0.321	24.181	1.00	14.22	C
ATOM	146	CE1	TYR	20	6.832	1.030	24.832	1.00	17.54	C
ATOM	147	CD2	TYR	20	7.647	-1.444	25.784	1.00	14.74	C
ATOM	148	CE2	TYR	20	6.642	-0.738	26.446	1.00	17.50	C
ATOM	149	CZ	TYR	20	6.241	0.495	25.962	1.00	15.67	C
ATOM	150	OH	TYR	20	5.246	1.197	26.603	1.00	19.53	O
ATOM	151	C	TYR	20	10.953	-1.921	25.849	1.00	11.15	C
ATOM	152	O	TYR	20	10.882	-1.216	26.856	1.00	11.41	O
ATOM	153	N	SER	21	11.192	-3.227	25.906	1.00	11.24	N
ATOM	154	CA	SER	21	11.394	-3.885	27.192	1.00	12.53	C
ATOM	155	CB	SER	21	11.539	-5.396	27.004	1.00	14.54	C
ATOM	156	OG	SER	21	10.376	-5.938	26.409	1.00	22.30	O
ATOM	157	C	SER	21	12.641	-3.331	27.868	1.00	11.57	C
ATOM	158	O	SER	21	12.749	-3.343	29.094	1.00	11.56	O
ATOM	159	N	ALA	22	13.578	-2.837	27.061	1.00	9.30	N
ATOM	160	CA	ALA	22	14.819	-2.276	27.585	1.00	9.39	C
ATOM	161	CB	ALA	22	15.912	-2.341	26.528	1.00	9.61	C
ATOM	162	C	ALA	22	14.640	-0.838	28.065	1.00	10.16	C
ATOM	163	O	ALA	22	15.584	-0.222	28.559	1.00	10.38	O
ATOM	164	N	GLY	23	13.433	-0.304	27.908	1.00	11.17	N
ATOM	165	CA	GLY	23	13.176	1.050	28.362	1.00	8.47	C
ATOM	166	C	GLY	23	12.885	2.085	27.296	1.00	9.22	C
ATOM	167	O	GLY	23	12.365	3.151	27.609	1.00	9.21	O
ATOM	168	N	ALA	24	13.218	1.801	26.041	1.00	8.28	N
ATOM	169	CA	ALA	24	12.961	2.774	24.979	1.00	8.71	C

ATOM	170	CB	ALA	24	13.533	2.275	23.659	1.00	9.22	C
ATOM	171	C	ALA	24	11.466	3.034	24.840	1.00	9.26	C
ATOM	172	O	ALA	24	10.667	2.103	24.812	1.00	8.31	O
ATOM	173	N	ARG	25	11.092	4.308	24.751	1.00	8.23	N
ATOM	174	CA	ARG	25	9.691	4.674	24.624	1.00	8.80	C
ATOM	175	CB	ARG	25	9.237	5.422	25.882	1.00	9.94	C
ATOM	176	CG	ARG	25	9.245	4.557	27.143	1.00	9.83	C
ATOM	177	CD	ARG	25	8.122	3.508	27.120	1.00	11.67	C
ATOM	178	NE	ARG	25	8.173	2.605	28.273	1.00	13.01	N
ATOM	179	CZ	ARG	25	8.955	1.532	28.353	1.00	12.54	C
ATOM	180	NH1	ARG	25	9.758	1.215	27.346	1.00	11.20	N
ATOM	181	NH2	ARG	25	8.944	0.775	29.447	1.00	11.95	N
ATOM	182	C	ARG	25	9.440	5.507	23.369	1.00	8.55	C
ATOM	183	O	ARG	25	8.298	5.719	22.965	1.00	8.97	O
ATOM	184	N	PHE	26	10.513	5.981	22.746	1.00	7.83	N
ATOM	185	CA	PHE	26	10.370	6.747	21.519	1.00	7.03	C
ATOM	186	CB	PHE	26	10.312	8.262	21.799	1.00	8.01	C
ATOM	187	CG	PHE	26	11.620	8.860	22.252	1.00	7.83	C
ATOM	188	CD1	PHE	26	12.509	9.419	21.333	1.00	7.10	C
ATOM	189	CD2	PHE	26	11.967	8.858	23.598	1.00	7.97	C
ATOM	190	CE1	PHE	26	13.724	9.967	21.756	1.00	7.84	C
ATOM	191	CE2	PHE	26	13.173	9.399	24.028	1.00	8.60	C
ATOM	192	CZ	PHE	26	14.056	9.957	23.103	1.00	8.23	C
ATOM	193	C	PHE	26	11.528	6.418	20.590	1.00	7.59	C
ATOM	194	O	PHE	26	12.609	6.022	21.036	1.00	7.76	O
ATOM	195	N	VAL	27	11.287	6.565	19.295	1.00	7.81	N
ATOM	196	CA	VAL	27	12.312	6.306	18.297	1.00	6.70	C
ATOM	197	CB	VAL	27	12.227	4.844	17.751	1.00	7.18	C
ATOM	198	CG1	VAL	27	10.877	4.596	17.098	1.00	9.60	C
ATOM	199	CG2	VAL	27	13.360	4.584	16.763	1.00	6.76	C
ATOM	200	C	VAL	27	12.154	7.300	17.158	1.00	7.99	C
ATOM	201	O	VAL	27	11.039	7.602	16.733	1.00	9.89	O
ATOM	202	N	ILE	28	13.277	7.826	16.684	1.00	6.80	N
ATOM	203	CA	ILE	28	13.272	8.781	15.588	1.00	7.80	C
ATOM	204	CB	ILE	28	14.094	10.028	15.954	1.00	8.05	C
ATOM	205	CG2	ILE	28	13.839	11.136	14.938	1.00	8.66	C
ATOM	206	CG1	ILE	28	13.669	10.513	17.347	1.00	10.17	C
ATOM	207	CD1	ILE	28	14.430	11.720	17.857	1.00	10.54	C
ATOM	208	C	ILE	28	13.865	8.025	14.403	1.00	8.97	C
ATOM	209	O	ILE	28	14.972	7.493	14.478	1.00	9.55	O
ATOM	210	N	ILE	29	13.105	7.978	13.316	1.00	8.53	N
ATOM	211	CA	ILE	29	13.481	7.222	12.127	1.00	8.93	C
ATOM	212	CB	ILE	29	12.321	6.283	11.750	1.00	9.87	C
ATOM	213	CG2	ILE	29	12.739	5.362	10.617	1.00	10.14	C
ATOM	214	CG1	ILE	29	11.892	5.478	12.983	1.00	11.49	C
ATOM	215	CD1	ILE	29	10.541	4.801	12.845	1.00	10.13	C
ATOM	216	C	ILE	29	13.814	8.094	10.923	1.00	9.24	C
ATOM	217	O	ILE	29	13.030	8.964	10.545	1.00	9.21	O
ATOM	218	N	LYS	30	14.966	7.857	10.302	1.00	7.24	N
ATOM	219	CA	LYS	30	15.326	8.658	9.140	1.00	9.11	C
ATOM	220	CB	LYS	30	16.712	8.287	8.611	1.00	9.18	C
ATOM	221	CG	LYS	30	17.131	9.128	7.407	1.00	9.92	C
ATOM	222	CD	LYS	30	18.584	8.908	7.031	1.00	11.62	C
ATOM	223	CE	LYS	30	18.991	9.811	5.877	1.00	11.99	C
ATOM	224	NZ	LYS	30	20.435	9.648	5.544	1.00	15.36	N
ATOM	225	C	LYS	30	14.296	8.438	8.044	1.00	9.91	C
ATOM	226	O	LYS	30	13.989	7.306	7.687	1.00	11.70	O

ATOM	227	N	ALA	31	13.755	9.529	7.516	1.00	9.46	N
ATOM	228	CA	ALA	31	12.766	9.431	6.456	1.00	9.28	C
ATOM	229	CB	ALA	31	11.578	10.345	6.759	1.00	10.85	C
ATOM	230	C	ALA	31	13.369	9.814	5.122	1.00	9.87	C
ATOM	231	O	ALA	31	13.215	9.101	4.128	1.00	9.53	O
ATOM	232	N	THR	32	14.085	10.933	5.115	1.00	9.84	N
ATOM	233	CA	THR	32	14.658	11.467	3.890	1.00	9.60	C
ATOM	234	CB	THR	32	13.717	12.536	3.309	1.00	9.01	C
ATOM	235	OG1	THR	32	13.419	13.493	4.340	1.00	9.93	O
ATOM	236	CG2	THR	32	12.418	11.918	2.822	1.00	9.08	C
ATOM	237	C	THR	32	16.008	12.146	4.063	1.00	9.55	C
ATOM	238	O	THR	32	16.458	12.401	5.182	1.00	9.15	O
ATOM	239	N	GLU	33	16.649	12.423	2.930	1.00	10.64	N
ATOM	240	CA	GLU	33	17.906	13.161	2.890	1.00	10.54	C
ATOM	241	CB	GLU	33	19.147	12.261	2.873	1.00	12.29	C
ATOM	242	CG	GLU	33	20.413	13.127	2.953	1.00	11.87	C
ATOM	243	CD	GLU	33	21.709	12.371	3.165	1.00	13.85	C
ATOM	244	OE1	GLU	33	21.762	11.463	4.022	1.00	13.17	O
ATOM	245	OE2	GLU	33	22.698	12.717	2.483	1.00	13.84	O
ATOM	246	C	GLU	33	17.857	13.998	1.615	1.00	11.92	C
ATOM	247	O	GLU	33	17.575	13.480	0.531	1.00	10.67	O
ATOM	248	N	GLY	34	18.111	15.296	1.750	1.00	10.35	N
ATOM	249	CA	GLY	34	18.053	16.177	0.597	1.00	10.42	C
ATOM	250	C	GLY	34	16.666	16.123	-0.016	1.00	10.18	C
ATOM	251	O	GLY	34	15.660	16.162	0.694	1.00	9.62	O
ATOM	252	N	THR	35	16.606	16.026	-1.339	1.00	11.17	N
ATOM	253	CA	THR	35	15.333	15.952	-2.045	1.00	12.92	C
ATOM	254	CB	THR	35	15.086	17.230	-2.867	1.00	12.02	C
ATOM	255	OG1	THR	35	16.262	17.537	-3.631	1.00	12.97	O
ATOM	256	CG2	THR	35	14.759	18.402	-1.952	1.00	12.56	C
ATOM	257	C	THR	35	15.359	14.762	-2.996	1.00	12.41	C
ATOM	258	O	THR	35	14.511	14.645	-3.882	1.00	13.56	O
ATOM	259	N	SER	36	16.324	13.870	-2.788	1.00	14.29	N
ATOM	260	CA	SER	36	16.491	12.711	-3.653	1.00	14.58	C
ATOM	261	CB	SER	36	17.751	12.894	-4.498	1.00	15.67	C
ATOM	262	OG	SER	36	18.896	13.006	-3.669	1.00	18.90	O
ATOM	263	C	SER	36	16.577	11.358	-2.955	1.00	14.43	C
ATOM	264	O	SER	36	16.554	10.323	-3.620	1.00	14.05	O
ATOM	265	N	TYR	37	16.677	11.348	-1.631	1.00	12.53	N
ATOM	266	CA	TYR	37	16.798	10.079	-0.924	1.00	12.33	C
ATOM	267	CB	TYR	37	18.192	9.974	-0.285	1.00	11.87	C
ATOM	268	CG	TYR	37	18.398	8.740	0.576	1.00	12.77	C
ATOM	269	CD1	TYR	37	17.987	8.715	1.914	1.00	12.80	C
ATOM	270	CE1	TYR	37	18.134	7.563	2.697	1.00	12.52	C
ATOM	271	CD2	TYR	37	18.963	7.583	0.043	1.00	13.73	C
ATOM	272	CE2	TYR	37	19.113	6.429	0.814	1.00	13.53	C
ATOM	273	CZ	TYR	37	18.694	6.426	2.139	1.00	14.41	C
ATOM	274	OH	TYR	37	18.819	5.281	2.894	1.00	15.44	O
ATOM	275	C	TYR	37	15.743	9.801	0.134	1.00	12.54	C
ATOM	276	O	TYR	37	15.366	10.682	0.905	1.00	12.09	O
ATOM	277	N	THR	38	15.268	8.560	0.158	1.00	12.11	N
ATOM	278	CA	THR	38	14.305	8.127	1.158	1.00	10.40	C
ATOM	279	CB	THR	38	12.909	7.786	0.556	1.00	9.15	C
ATOM	280	OG1	THR	38	13.035	6.733	-0.410	1.00	11.55	O
ATOM	281	CG2	THR	38	12.280	9.020	-0.084	1.00	8.84	C
ATOM	282	C	THR	38	14.871	6.872	1.807	1.00	11.90	C
ATOM	283	O	THR	38	15.600	6.109	1.169	1.00	9.94	O

ATOM	284	N	ASN	39	14.553	6.674	3.081	1.00	11.67	N
ATOM	285	CA	ASN	39	15.001	5.500	3.822	1.00	12.56	C
ATOM	286	CB	ASN	39	14.807	5.759	5.319	1.00	11.21	C
ATOM	287	CG	ASN	39	15.068	4.536	6.178	1.00	11.92	C
ATOM	288	OD1	ASN	39	14.890	4.584	7.399	1.00	13.52	O
ATOM	289	ND2	ASN	39	15.490	3.439	5.559	1.00	8.81	N
ATOM	290	C	ASN	39	14.117	4.344	3.351	1.00	12.44	C
ATOM	291	O	ASN	39	12.914	4.337	3.610	1.00	11.60	O
ATOM	292	N	PRO	40	14.699	3.352	2.651	1.00	13.24	N
ATOM	293	CD	PRO	40	16.127	3.162	2.344	1.00	14.17	C
ATOM	294	CA	PRO	40	13.905	2.218	2.164	1.00	14.67	C
ATOM	295	CB	PRO	40	14.919	1.416	1.347	1.00	14.67	C
ATOM	296	CG	PRO	40	16.197	1.671	2.066	1.00	15.03	C
ATOM	297	C	PRO	40	13.253	1.390	3.266	1.00	15.23	C
ATOM	298	O	PRO	40	12.280	0.670	3.023	1.00	16.56	O
ATOM	299	N	SER	41	13.789	1.498	4.476	1.00	14.47	N
ATOM	300	CA	SER	41	13.261	0.761	5.615	1.00	14.96	C
ATOM	301	CB	SER	41	14.409	0.314	6.522	1.00	14.59	C
ATOM	302	OG	SER	41	15.248	-0.624	5.875	1.00	16.33	O
ATOM	303	C	SER	41	12.273	1.583	6.436	1.00	12.89	C
ATOM	304	O	SER	41	11.710	1.089	7.411	1.00	11.85	O
ATOM	305	N	PHE	42	12.042	2.830	6.031	1.00	13.21	N
ATOM	306	CA	PHE	42	11.146	3.706	6.780	1.00	14.21	C
ATOM	307	CB	PHE	42	10.877	5.000	6.010	1.00	14.18	C
ATOM	308	CG	PHE	42	10.090	6.004	6.802	1.00	14.70	C
ATOM	309	CD1	PHE	42	10.704	6.749	7.804	1.00	12.81	C
ATOM	310	CD2	PHE	42	8.722	6.153	6.601	1.00	14.07	C
ATOM	311	CE1	PHE	42	9.968	7.626	8.597	1.00	12.85	C
ATOM	312	CE2	PHE	42	7.974	7.028	7.392	1.00	14.49	C
ATOM	313	CZ	PHE	42	8.601	7.764	8.392	1.00	13.32	C
ATOM	314	C	PHE	42	9.804	3.113	7.198	1.00	14.91	C
ATOM	315	O	PHE	42	9.465	3.114	8.382	1.00	15.23	O
ATOM	316	N	SER	43	9.033	2.621	6.233	1.00	15.15	N
ATOM	317	CA	SER	43	7.721	2.063	6.536	1.00	15.56	C
ATOM	318	CB	SER	43	7.015	1.633	5.248	1.00	17.57	C
ATOM	319	OG	SER	43	5.695	1.203	5.528	1.00	21.79	O
ATOM	320	C	SER	43	7.781	0.883	7.503	1.00	14.08	C
ATOM	321	O	SER	43	6.969	0.792	8.426	1.00	13.73	O
ATOM	322	N	SER	44	8.736	-0.016	7.286	1.00	13.68	N
ATOM	323	CA	SER	44	8.888	-1.186	8.147	1.00	14.95	C
ATOM	324	CB	SER	44	9.990	-2.100	7.609	1.00	14.71	C
ATOM	325	OG	SER	44	10.158	-3.230	8.449	1.00	17.46	O
ATOM	326	C	SER	44	9.240	-0.759	9.567	1.00	13.97	C
ATOM	327	O	SER	44	8.706	-1.290	10.542	1.00	15.18	O
ATOM	328	N	GLN	45	10.152	0.201	9.672	1.00	13.44	N
ATOM	329	CA	GLN	45	10.580	0.711	10.965	1.00	12.52	C
ATOM	330	CB	GLN	45	11.808	1.609	10.779	1.00	12.56	C
ATOM	331	CG	GLN	45	13.101	0.828	10.601	1.00	12.22	C
ATOM	332	CD	GLN	45	14.237	1.656	10.014	1.00	12.18	C
ATOM	333	OE1	GLN	45	15.414	1.320	10.172	1.00	13.29	O
ATOM	334	NE2	GLN	45	13.891	2.727	9.321	1.00	9.65	N
ATOM	335	C	GLN	45	9.456	1.476	11.656	1.00	13.23	C
ATOM	336	O	GLN	45	9.194	1.283	12.842	1.00	11.93	O
ATOM	337	N	TYR	46	8.780	2.336	10.903	1.00	13.65	N
ATOM	338	CA	TYR	46	7.685	3.129	11.446	1.00	13.81	C
ATOM	339	CB	TYR	46	7.124	4.040	10.355	1.00	14.26	C
ATOM	340	CG	TYR	46	6.459	5.300	10.860	1.00	15.49	C

ATOM	341	CD1	TYR	46	7.215	6.422	11.201	1.00	16.10	C
ATOM	342	CE1	TYR	46	6.606	7.600	11.625	1.00	18.28	C
ATOM	343	CD2	TYR	46	5.073	5.385	10.963	1.00	17.81	C
ATOM	344	CE2	TYR	46	4.453	6.558	11.388	1.00	18.69	C
ATOM	345	CZ	TYR	46	5.224	7.661	11.715	1.00	17.25	C
ATOM	346	OH	TYR	46	4.613	8.826	12.117	1.00	20.18	O
ATOM	347	C	TYR	46	6.586	2.203	11.968	1.00	13.04	C
ATOM	348	O	TYR	46	6.051	2.409	13.054	1.00	13.73	O
ATOM	349	N	THR	47	6.259	1.180	11.182	1.00	14.06	N
ATOM	350	CA	THR	47	5.229	0.213	11.552	1.00	15.12	C
ATOM	351	CB	THR	47	4.901	-0.721	10.369	1.00	16.48	O
ATOM	352	OG1	THR	47	4.407	0.057	9.271	1.00	18.83	C
ATOM	353	CG2	THR	47	3.847	-1.743	10.770	1.00	19.12	C
ATOM	354	C	THR	47	5.681	-0.632	12.743	1.00	13.09	C
ATOM	355	O	THR	47	4.924	-0.831	13.693	1.00	13.80	O
ATOM	356	N	GLY	48	6.914	-1.125	12.686	1.00	14.54	N
ATOM	357	CA	GLY	48	7.439	-1.927	13.777	1.00	13.71	C
ATOM	358	C	GLY	48	7.413	-1.151	15.081	1.00	13.56	C
ATOM	359	O	GLY	48	7.074	-1.689	16.135	1.00	13.12	O
ATOM	360	N	ALA	49	7.764	0.128	15.006	1.00	13.63	N
ATOM	361	CA	ALA	49	7.775	0.987	16.180	1.00	12.78	C
ATOM	362	CB	ALA	49	8.387	2.342	15.830	1.00	11.97	C
ATOM	363	C	ALA	49	6.356	1.170	16.711	1.00	13.27	C
ATOM	364	O	ALA	49	6.106	1.015	17.904	1.00	13.68	O
ATOM	365	N	THR	50	5.426	1.496	15.818	1.00	13.57	N
ATOM	366	CA	THR	50	4.039	1.694	16.215	1.00	13.81	C
ATOM	367	CB	THR	50	3.153	2.042	14.994	1.00	14.88	C
ATOM	368	OG1	THR	50	3.667	3.213	14.344	1.00	14.25	O
ATOM	369	CG2	THR	50	1.726	2.315	15.432	1.00	14.67	C
ATOM	370	C	THR	50	3.486	0.434	16.887	1.00	14.53	C
ATOM	371	O	THR	50	2.899	0.503	17.969	1.00	14.65	O
ATOM	372	N	ASN	51	3.687	-0.713	16.244	1.00	14.96	N
ATOM	373	CA	ASN	51	3.197	-1.988	16.768	1.00	15.94	C
ATOM	374	CB	ASN	51	3.501	-3.118	15.779	1.00	17.04	C
ATOM	375	CG	ASN	51	2.641	-3.050	14.533	1.00	18.87	C
ATOM	376	OD1	ASN	51	2.885	-3.760	13.556	1.00	23.45	O
ATOM	377	ND2	ASN	51	1.623	-2.201	14.563	1.00	18.93	N
ATOM	378	C	ASN	51	3.776	-2.342	18.132	1.00	15.82	C
ATOM	379	O	ASN	51	3.148	-3.064	18.908	1.00	16.54	O
ATOM	380	N	ALA	52	4.969	-1.836	18.426	1.00	14.45	N
ATOM	381	CA	ALA	52	5.617	-2.118	19.702	1.00	13.40	C
ATOM	382	CB	ALA	52	7.129	-2.180	19.511	1.00	13.18	C
ATOM	383	C	ALA	52	5.264	-1.126	20.813	1.00	13.89	C
ATOM	384	O	ALA	52	5.782	-1.230	21.923	1.00	13.59	O
ATOM	385	N	GLY	53	4.393	-0.165	20.510	1.00	12.61	N
ATOM	386	CA	GLY	53	3.974	0.812	21.504	1.00	12.92	C
ATOM	387	C	GLY	53	4.803	2.083	21.584	1.00	11.67	C
ATOM	388	O	GLY	53	4.702	2.845	22.543	1.00	13.32	O
ATOM	389	N	PHE	54	5.614	2.321	20.564	1.00	12.04	N
ATOM	390	CA	PHE	54	6.482	3.494	20.529	1.00	10.87	C
ATOM	391	CB	PHE	54	7.654	3.251	19.578	1.00	10.04	C
ATOM	392	CG	PHE	54	8.768	2.464	20.170	1.00	7.52	C
ATOM	393	CD1	PHE	54	9.792	3.106	20.854	1.00	7.59	C
ATOM	394	CD2	PHE	54	8.797	1.079	20.052	1.00	8.68	C
ATOM	395	CE1	PHE	54	10.836	2.380	21.414	1.00	8.73	C
ATOM	396	CE2	PHE	54	9.836	0.341	20.608	1.00	9.98	C
ATOM	397	CZ	PHE	54	10.859	0.994	21.292	1.00	8.42	C

ATOM	398	C	PHE	54	5.858	4.796	20.084	1.00	10.76	C
ATOM	399	O	PHE	54	4.913	4.817	19.300	1.00	11.00	O
ATOM	400	N	ILE	55	6.410	5.883	20.609	1.00	10.03	N
ATOM	401	CA	ILE	55	6.036	7.216	20.178	1.00	10.46	C
ATOM	402	CB	ILE	55	6.276	8.271	21.278	1.00	10.83	C
ATOM	403	CG2	ILE	55	6.490	9.648	20.653	1.00	10.59	C
ATOM	404	CG1	ILE	55	5.084	8.286	22.240	1.00	12.74	C
ATOM	405	CD1	ILE	55	5.229	9.268	23.380	1.00	14.89	C
ATOM	406	C	ILE	55	7.124	7.301	19.108	1.00	10.50	C
ATOM	407	O	ILE	55	8.239	6.828	19.330	1.00	11.43	O
ATOM	408	N	ARG	56	6.814	7.849	17.942	1.00	9.31	N
ATOM	409	CA	ARG	56	7.825	7.905	16.898	1.00	10.41	C
ATOM	410	CB	ARG	56	7.806	6.614	16.066	1.00	10.46	C
ATOM	411	CG	ARG	56	6.560	6.431	15.204	1.00	11.80	C
ATOM	412	CD	ARG	56	5.368	5.943	16.016	1.00	12.23	C
ATOM	413	NE	ARG	56	4.150	5.876	15.210	1.00	11.50	N
ATOM	414	CZ	ARG	56	3.413	6.934	14.883	1.00	13.05	C
ATOM	415	NH1	ARG	56	3.768	8.145	15.294	1.00	12.98	N
ATOM	416	NH2	ARG	56	2.317	6.783	14.149	1.00	15.92	N
ATOM	417	C	ARG	56	7.664	9.094	15.974	1.00	9.24	C
ATOM	418	O	ARG	56	6.611	9.725	15.918	1.00	10.72	O
ATOM	419	N	GLY	57	8.732	9.391	15.250	1.00	8.17	N
ATOM	420	CA	GLY	57	8.710	10.497	14.319	1.00	8.43	C
ATOM	421	C	GLY	57	9.818	10.290	13.318	1.00	8.56	C
ATOM	422	O	GLY	57	10.595	9.347	13.440	1.00	9.96	O
ATOM	423	N	GLY	58	9.903	11.157	12.324	1.00	7.05	N
ATOM	424	CA	GLY	58	10.959	10.988	11.350	1.00	8.87	C
ATOM	425	C	GLY	58	12.005	12.072	11.459	1.00	7.06	C
ATOM	426	O	GLY	58	11.840	13.038	12.213	1.00	8.00	O
ATOM	427	N	TYR	59	13.111	11.896	10.744	1.00	6.86	N
ATOM	428	CA	TYR	59	14.128	12.926	10.724	1.00	6.61	C
ATOM	429	CB	TYR	59	15.260	12.655	11.739	1.00	7.16	C
ATOM	430	CG	TYR	59	16.318	11.624	11.397	1.00	5.88	C
ATOM	431	CD1	TYR	59	17.345	11.915	10.499	1.00	7.30	C
ATOM	432	CE1	TYR	59	18.393	11.014	10.285	1.00	10.55	C
ATOM	433	CD2	TYR	59	16.356	10.400	12.065	1.00	7.68	C
ATOM	434	CE2	TYR	59	17.393	9.493	11.860	1.00	8.35	C
ATOM	435	CZ	TYR	59	18.410	9.807	10.973	1.00	9.24	O
ATOM	436	OH	TYR	59	19.451	8.925	10.796	1.00	11.78	O
ATOM	437	C	TYR	59	14.641	13.076	9.304	1.00	7.04	C
ATOM	438	O	TYR	59	14.613	12.136	8.500	1.00	7.57	O
ATOM	439	N	HIS	60	15.063	14.292	8.999	1.00	6.28	N
ATOM	440	CA	HIS	60	15.554	14.643	7.683	1.00	8.29	C
ATOM	441	CB	HIS	60	14.774	15.852	7.162	1.00	8.44	C
ATOM	442	CG	HIS	60	15.283	16.380	5.859	1.00	8.90	C
ATOM	443	CD2	HIS	60	16.020	17.477	5.567	1.00	7.84	C
ATOM	444	ND1	HIS	60	15.064	15.733	4.662	1.00	9.21	N
ATOM	445	CE1	HIS	60	15.643	16.412	3.688	1.00	8.26	C
ATOM	446	NE2	HIS	60	16.230	17.474	4.210	1.00	9.63	N
ATOM	447	C	HIS	60	17.022	14.999	7.742	1.00	7.81	C
ATOM	448	O	HIS	60	17.431	15.812	8.569	1.00	7.09	O
ATOM	449	N	PHE	61	17.829	14.385	6.883	1.00	8.81	N
ATOM	450	CA	PHE	61	19.230	14.752	6.869	1.00	9.62	C
ATOM	451	CB	PHE	61	20.131	13.590	6.456	1.00	10.57	C
ATOM	452	CG	PHE	61	21.590	13.901	6.607	1.00	11.33	C
ATOM	453	CD1	PHE	61	22.239	14.708	5.681	1.00	12.19	C
ATOM	454	CD2	PHE	61	22.298	13.452	7.715	1.00	13.47	C

ATOM	455	CE1	PHE	61	23.568	15.070	5.854	1.00	12.02	C
ATOM	456	CE2	PHE	61	23.635	13.808	7.902	1.00	14.16	C
ATOM	457	CZ	PHE	61	24.270	14.621	6.968	1.00	13.00	C
ATOM	458	C	PHE	61	19.335	15.898	5.871	1.00	9.32	C
ATOM	459	O	PHE	61	19.196	15.717	4.658	1.00	7.98	O
ATOM	460	N	ALA	62	19.561	17.087	6.408	1.00	8.85	N
ATOM	461	CA	ALA	62	19.640	18.295	5.610	1.00	8.63	C
ATOM	462	CB	ALA	62	19.598	19.510	6.525	1.00	10.32	C
ATOM	463	C	ALA	62	20.831	18.418	4.681	1.00	8.95	C
ATOM	464	O	ALA	62	21.903	17.883	4.930	1.00	9.65	O
ATOM	465	N	HIS	63	20.599	19.143	3.594	1.00	10.51	N
ATOM	466	CA	HIS	63	21.616	19.473	2.601	1.00	10.05	C
ATOM	467	CB	HIS	63	21.295	18.831	1.249	1.00	13.29	C
ATOM	468	CG	HIS	63	21.826	17.440	1.092	1.00	14.57	C
ATOM	469	CD2	HIS	63	22.205	16.753	-0.011	1.00	16.69	C
ATOM	470	ND1	HIS	63	21.980	16.574	2.154	1.00	16.81	N
ATOM	471	CE1	HIS	63	22.432	15.415	1.711	1.00	15.65	C
ATOM	472	NE2	HIS	63	22.576	15.496	0.401	1.00	19.00	N
ATOM	473	C	HIS	63	21.410	20.984	2.520	1.00	11.19	C
ATOM	474	O	HIS	63	20.926	21.506	1.517	1.00	11.30	O
ATOM	475	N	PRO	64	21.758	21.707	3.597	1.00	11.05	N
ATOM	476	CD	PRO	64	22.474	21.258	4.805	1.00	11.87	C
ATOM	477	CA	PRO	64	21.581	23.161	3.611	1.00	11.02	C
ATOM	478	CB	PRO	64	22.372	23.596	4.841	1.00	11.71	C
ATOM	479	CG	PRO	64	22.250	22.414	5.755	1.00	11.96	C
ATOM	480	C	PRO	64	22.060	23.867	2.354	1.00	11.76	C
ATOM	481	O	PRO	64	23.173	23.632	1.891	1.00	11.72	O
ATOM	482	N	GLY	65	21.202	24.718	1.799	1.00	11.16	N
ATOM	483	CA	GLY	65	21.574	25.485	0.625	1.00	13.36	C
ATOM	484	C	GLY	65	21.511	24.833	-0.742	1.00	13.92	C
ATOM	485	O	GLY	65	21.361	25.538	-1.739	1.00	15.80	O
ATOM	486	N	GLU	66	21.624	23.510	-0.815	1.00	13.86	N
ATOM	487	CA	GLU	66	21.585	22.836	-2.115	1.00	14.03	C
ATOM	488	CB	GLU	66	21.864	21.343	-1.952	1.00	15.79	C
ATOM	489	CG	GLU	66	23.117	21.062	-1.143	1.00	19.86	C
ATOM	490	CD	GLU	66	23.840	19.806	-1.579	1.00	21.47	C
ATOM	491	OE1	GLU	66	23.170	18.802	-1.896	1.00	20.38	O
ATOM	492	OE2	GLU	66	25.088	19.822	-1.589	1.00	23.23	O
ATOM	493	C	GLU	66	20.242	23.061	-2.799	1.00	13.14	C
ATOM	494	O	GLU	66	20.163	23.166	-4.023	1.00	14.17	O
ATOM	495	N	THR	67	19.193	23.126	-1.989	1.00	12.59	N
ATOM	496	CA	THR	67	17.837	23.393	-2.456	1.00	11.81	C
ATOM	497	CB	THR	67	17.014	22.104	-2.669	1.00	13.05	C
ATOM	498	OG1	THR	67	17.123	21.261	-1.517	1.00	14.08	O
ATOM	499	CG2	THR	67	17.510	21.358	-3.900	1.00	14.03	C
ATOM	500	C	THR	67	17.225	24.225	-1.340	1.00	12.15	C
ATOM	501	O	THR	67	17.815	24.339	-0.268	1.00	11.23	O
ATOM	502	N	THR	68	16.060	24.813	-1.578	1.00	11.42	N
ATOM	503	CA	THR	68	15.431	25.653	-0.559	1.00	10.96	C
ATOM	504	CB	THR	68	14.196	26.383	-1.113	1.00	8.90	O
ATOM	505	OG1	THR	68	13.199	25.420	-1.474	1.00	11.69	C
ATOM	506	CG2	THR	68	14.571	27.228	-2.326	1.00	11.46	C
ATOM	507	C	THR	68	14.990	24.887	0.682	1.00	9.89	C
ATOM	508	O	THR	68	14.789	23.671	0.645	1.00	9.93	O
ATOM	509	N	GLY	69	14.843	25.614	1.787	1.00	9.57	N
ATOM	510	CA	GLY	69	14.398	24.990	3.017	1.00	9.23	C
ATOM	511	C	GLY	69	13.006	24.416	2.830	1.00	9.28	C

ATOM	512	O	GLY	69	12.692	23.351	3.360	1.00	9.06	O
ATOM	513	N	ALA	70	12.169	25.112	2.064	1.00	8.62	N
ATOM	514	CA	ALA	70	10.809	24.649	1.820	1.00	8.47	C
ATOM	515	CB	ALA	70	9.998	25.739	1.120	1.00	9.61	C
ATOM	516	C	ALA	70	10.808	23.379	0.977	1.00	9.01	C
ATOM	517	O	ALA	70	10.020	22.466	1.220	1.00	9.84	O
ATOM	518	N	ALA	71	11.694	23.322	-0.013	1.00	9.54	N
ATOM	519	CA	ALA	71	11.772	22.151	-0.879	1.00	10.20	C
ATOM	520	CB	ALA	71	12.819	22.365	-1.968	1.00	11.05	C
ATOM	521	C	ALA	71	12.107	20.908	-0.068	1.00	9.14	C
ATOM	522	O	ALA	71	11.494	19.856	-0.252	1.00	11.16	O
ATOM	523	N	GLN	72	13.079	21.022	0.831	1.00	8.70	N
ATOM	524	CA	GLN	72	13.448	19.872	1.645	1.00	8.07	C
ATOM	525	CB	GLN	72	14.834	20.083	2.270	1.00	8.17	C
ATOM	526	CG	GLN	72	15.949	19.805	1.261	1.00	9.46	C
ATOM	527	CD	GLN	72	17.345	20.037	1.800	1.00	10.49	C
ATOM	528	OE1	GLN	72	17.731	19.472	2.819	1.00	9.59	O
ATOM	529	NE2	GLN	72	18.118	20.860	1.103	1.00	10.68	N
ATOM	530	C	GLN	72	12.393	19.558	2.704	1.00	8.15	C
ATOM	531	O	GLN	72	12.157	18.395	3.018	1.00	7.80	O
ATOM	532	N	ALA	73	11.744	20.584	3.245	1.00	8.07	N
ATOM	533	CA	ALA	73	10.700	20.360	4.239	1.00	8.57	C
ATOM	534	CB	ALA	73	10.205	21.689	4.794	1.00	9.36	C
ATOM	535	C	ALA	73	9.544	19.592	3.595	1.00	10.23	C
ATOM	536	O	ALA	73	9.012	18.650	4.178	1.00	9.83	O
ATOM	537	N	ASP	74	9.166	19.996	2.386	1.00	10.88	N
ATOM	538	CA	ASP	74	8.074	19.339	1.672	1.00	10.53	C
ATOM	539	CB	ASP	74	7.760	20.087	0.376	1.00	13.45	C
ATOM	540	CG	ASP	74	6.960	21.347	0.611	1.00	13.76	C
ATOM	541	OD1	ASP	74	6.763	22.109	-0.356	1.00	17.04	O
ATOM	542	OD2	ASP	74	6.521	21.572	1.757	1.00	15.50	O
ATOM	543	C	ASP	74	8.393	17.888	1.347	1.00	10.59	C
ATOM	544	O	ASP	74	7.549	17.003	1.506	1.00	12.21	O
ATOM	545	N	TYR	75	9.611	17.647	0.881	1.00	10.84	N
ATOM	546	CA	TYR	75	10.036	16.300	0.532	1.00	10.93	C
ATOM	547	CB	TYR	75	11.456	16.340	-0.025	1.00	10.46	C
ATOM	548	CG	TYR	75	11.916	15.040	-0.636	1.00	11.47	C
ATOM	549	CD1	TYR	75	11.353	14.567	-1.820	1.00	12.08	C
ATOM	550	CE1	TYR	75	11.770	13.362	-2.383	1.00	12.91	C
ATOM	551	CD2	TYR	75	12.909	14.278	-0.026	1.00	11.24	C
ATOM	552	CE2	TYR	75	13.336	13.070	-0.579	1.00	12.36	C
ATOM	553	CZ	TYR	75	12.764	12.619	-1.755	1.00	13.84	C
ATOM	554	OH	TYR	75	13.184	11.425	-2.302	1.00	14.45	O
ATOM	555	C	TYR	75	9.985	15.414	1.773	1.00	10.09	C
ATOM	556	O	TYR	75	9.460	14.302	1.742	1.00	9.61	O
ATOM	557	N	PHE	76	10.541	15.930	2.864	1.00	9.22	N
ATOM	558	CA	PHE	76	10.576	15.236	4.147	1.00	9.37	C
ATOM	559	CB	PHE	76	11.249	16.170	5.168	1.00	7.53	C
ATOM	560	CG	PHE	76	11.233	15.673	6.589	1.00	8.11	C
ATOM	561	CD1	PHE	76	11.593	14.366	6.899	1.00	7.28	C
ATOM	562	CD2	PHE	76	10.931	16.549	7.630	1.00	7.17	C
ATOM	563	CE1	PHE	76	11.659	13.941	8.228	1.00	6.77	C
ATOM	564	CE2	PHE	76	10.994	16.136	8.958	1.00	8.14	C
ATOM	565	CZ	PHE	76	11.360	14.830	9.256	1.00	6.14	C
ATOM	566	C	PHE	76	9.158	14.850	4.590	1.00	9.87	C
ATOM	567	O	PHE	76	8.896	13.699	4.956	1.00	10.31	O
ATOM	568	N	ILE	77	8.237	15.806	4.524	1.00	9.71	N

ATOM	569	CA	ILE	77	6.856	15.574	4.934	1.00	10.22	C
ATOM	570	CB	ILE	77	6.086	16.910	4.998	1.00	8.38	C
ATOM	571	CG2	ILE	77	4.613	16.653	5.293	1.00	10.00	C
ATOM	572	CG1	ILE	77	6.719	17.797	6.075	1.00	10.10	C
ATOM	573	CD1	ILE	77	6.183	19.200	6.126	1.00	10.52	C
ATOM	574	C	ILE	77	6.112	14.603	4.022	1.00	11.93	C
ATOM	575	O	ILE	77	5.379	13.728	4.491	1.00	11.70	O
ATOM	576	N	ALA	78	6.304	14.755	2.719	1.00	12.16	N
ATOM	577	CA	ALA	78	5.646	13.882	1.758	1.00	13.79	C
ATOM	578	CB	ALA	78	5.999	14.308	0.338	1.00	13.62	C
ATOM	579	C	ALA	78	6.051	12.430	1.980	1.00	15.11	C
ATOM	580	O	ALA	78	5.283	11.513	1.681	1.00	16.06	O
ATOM	581	N	HIS	79	7.251	12.223	2.518	1.00	14.03	N
ATOM	582	CA	HIS	79	7.737	10.874	2.752	1.00	14.55	C
ATOM	583	CB	HIS	79	9.083	10.684	2.051	1.00	13.83	C
ATOM	584	CG	HIS	79	8.996	10.826	0.563	1.00	17.25	C
ATOM	585	CD2	HIS	79	8.682	9.927	-0.399	1.00	16.09	C
ATOM	586	ND1	HIS	79	9.167	12.033	-0.081	1.00	18.34	N
ATOM	587	CE1	HIS	79	8.959	11.871	-1.376	1.00	19.14	C
ATOM	588	NE2	HIS	79	8.663	10.603	-1.595	1.00	18.94	N
ATOM	589	C	HIS	79	7.814	10.417	4.202	1.00	13.74	C
ATOM	590	O	HIS	79	8.737	9.700	4.591	1.00	14.92	O
ATOM	591	N	GLY	80	6.839	10.846	4.999	1.00	13.36	N
ATOM	592	CA	GLY	80	6.763	10.409	6.382	1.00	12.06	C
ATOM	593	C	GLY	80	7.284	11.288	7.496	1.00	12.32	C
ATOM	594	O	GLY	80	7.130	10.933	8.661	1.00	13.45	O
ATOM	595	N	GLY	81	7.881	12.426	7.165	1.00	10.90	N
ATOM	596	CA	GLY	81	8.415	13.287	8.206	1.00	10.50	C
ATOM	597	C	GLY	81	7.454	14.290	8.811	1.00	11.40	C
ATOM	598	O	GLY	81	7.855	15.100	9.646	1.00	10.52	O
ATOM	599	N	GLY	82	6.192	14.241	8.403	1.00	11.30	N
ATOM	600	CA	GLY	82	5.209	15.176	8.922	1.00	11.13	C
ATOM	601	C	GLY	82	4.723	14.894	10.332	1.00	11.46	C
ATOM	602	O	GLY	82	5.355	14.166	11.101	1.00	10.82	O
ATOM	603	N	TRP	83	3.590	15.489	10.680	1.00	11.16	N
ATOM	604	CA	TRP	83	3.012	15.305	12.000	1.00	11.62	C
ATOM	605	CB	TRP	83	3.451	16.431	12.943	1.00	11.98	C
ATOM	606	CG	TRP	83	2.903	16.273	14.334	1.00	13.43	C
ATOM	607	CD2	TRP	83	1.669	16.805	14.837	1.00	14.55	C
ATOM	608	CE2	TRP	83	1.530	16.352	16.168	1.00	14.51	C
ATOM	609	CE3	TRP	83	0.665	17.619	14.290	1.00	14.40	C
ATOM	610	CD1	TRP	83	3.448	15.542	15.354	1.00	14.15	C
ATOM	611	NE1	TRP	83	2.628	15.585	16.458	1.00	13.55	N
ATOM	612	CZ2	TRP	83	0.427	16.686	16.965	1.00	14.20	C
ATOM	613	CZ3	TRP	83	-0.435	17.952	15.083	1.00	15.44	C
ATOM	614	CH2	TRP	83	-0.542	17.484	16.407	1.00	15.83	C
ATOM	615	C	TRP	83	1.495	15.304	11.925	1.00	13.11	C
ATOM	616	O	TRP	83	0.905	16.056	11.152	1.00	13.20	O
ATOM	617	N	SER	84	0.877	14.449	12.732	1.00	14.75	N
ATOM	618	CA	SER	84	-0.574	14.356	12.813	1.00	16.35	C
ATOM	619	CB	SER	84	-1.108	13.198	11.964	1.00	17.16	C
ATOM	620	OG	SER	84	-1.130	11.991	12.701	1.00	20.11	O
ATOM	621	C	SER	84	-0.900	14.120	14.283	1.00	16.60	C
ATOM	622	O	SER	84	-0.037	13.689	15.055	1.00	15.40	O
ATOM	623	N	GLY	85	-2.140	14.400	14.671	1.00	16.36	N
ATOM	624	CA	GLY	85	-2.528	14.234	16.059	1.00	17.35	C
ATOM	625	C	GLY	85	-2.947	12.845	16.501	1.00	18.30	C

ATOM	626	O	GLY	85	-3.963	12.696	17.183	1.00	18.82	O
ATOM	627	N	ASP	86	-2.179	11.825	16.135	1.00	17.43	N
ATOM	628	CA	ASP	86	-2.528	10.469	16.545	1.00	16.76	C
ATOM	629	CB	ASP	86	-1.982	9.437	15.555	1.00	14.57	C
ATOM	630	CG	ASP	86	-0.474	9.504	15.404	1.00	15.10	C
ATOM	631	OD1	ASP	86	0.184	10.189	16.211	1.00	12.94	O
ATOM	632	OD2	ASP	86	0.048	8.856	14.473	1.00	15.78	O
ATOM	633	C	ASP	86	-2.026	10.169	17.955	1.00	16.57	C
ATOM	634	O	ASP	86	-2.133	9.039	18.435	1.00	17.39	O
ATOM	635	N	GLY	87	-1.477	11.191	18.607	1.00	16.18	N
ATOM	636	CA	GLY	87	-0.991	11.048	19.970	1.00	15.28	C
ATOM	637	C	GLY	87	0.361	10.387	20.180	1.00	13.56	O
ATOM	638	O	GLY	87	0.865	10.349	21.306	1.00	14.95	O
ATOM	639	N	ILE	88	0.961	9.876	19.111	1.00	13.23	N
ATOM	640	CA	ILE	88	2.250	9.207	19.237	1.00	12.21	C
ATOM	641	CB	ILE	88	2.086	7.675	19.126	1.00	14.17	C
ATOM	642	CG2	ILE	88	1.319	7.153	20.328	1.00	13.24	C
ATOM	643	CG1	ILE	88	1.376	7.321	17.816	1.00	13.58	C
ATOM	644	CD1	ILE	88	1.278	5.827	17.543	1.00	17.71	C
ATOM	645	C	ILE	88	3.279	9.655	18.208	1.00	12.30	C
ATOM	646	O	ILE	88	4.276	8.970	17.987	1.00	13.07	O
ATOM	647	N	THR	89	3.044	10.803	17.585	1.00	10.53	N
ATOM	648	CA	THR	89	3.972	11.308	16.579	1.00	10.30	C
ATOM	649	CB	THR	89	3.227	11.757	15.304	1.00	9.66	C
ATOM	650	OG1	THR	89	2.435	10.677	14.800	1.00	10.21	O
ATOM	651	CG2	THR	89	4.221	12.180	14.232	1.00	10.87	C
ATOM	652	C	THR	89	4.769	12.497	17.097	1.00	9.85	C
ATOM	653	O	THR	89	4.202	13.462	17.600	1.00	10.74	O
ATOM	654	N	LEU	90	6.092	12.417	16.992	1.00	9.41	N
ATOM	655	CA	LEU	90	6.941	13.521	17.423	1.00	9.53	C
ATOM	656	CB	LEU	90	8.333	13.022	17.807	1.00	10.73	C
ATOM	657	CG	LEU	90	8.499	12.071	18.988	1.00	11.89	C
ATOM	658	CD1	LEU	90	9.919	11.512	18.973	1.00	13.65	C
ATOM	659	CD2	LEU	90	8.224	12.803	20.292	1.00	13.70	C
ATOM	660	C	LEU	90	7.103	14.468	16.247	1.00	8.78	C
ATOM	661	O	LEU	90	7.064	14.045	15.096	1.00	8.12	O
ATOM	662	N	PRO	91	7.255	15.770	16.517	1.00	8.98	N
ATOM	663	CD	PRO	91	7.098	16.500	17.787	1.00	8.67	C
ATOM	664	CA	PRO	91	7.434	16.691	15.392	1.00	8.62	C
ATOM	665	CB	PRO	91	7.624	18.036	16.079	1.00	9.81	C
ATOM	666	CG	PRO	91	6.772	17.900	17.309	1.00	9.61	C
ATOM	667	C	PRO	91	8.705	16.231	14.670	1.00	8.37	C
ATOM	668	O	PRO	91	9.646	15.761	15.317	1.00	8.00	O
ATOM	669	N	GLY	92	8.730	16.354	13.347	1.00	8.19	N
ATOM	670	CA	GLY	92	9.895	15.936	12.585	1.00	6.79	C
ATOM	671	C	GLY	92	11.175	16.604	13.056	1.00	7.63	C
ATOM	672	O	GLY	92	11.152	17.741	13.529	1.00	6.72	O
ATOM	673	N	MET	93	12.292	15.895	12.923	1.00	6.65	N
ATOM	674	CA	MET	93	13.590	16.411	13.344	1.00	6.09	C
ATOM	675	CB	MET	93	14.281	15.380	14.247	1.00	6.41	C
ATOM	676	CG	MET	93	15.642	15.816	14.781	1.00	5.41	C
ATOM	677	SD	MET	93	16.341	14.662	15.982	1.00	8.36	S
ATOM	678	CE	MET	93	17.134	13.527	14.892	1.00	9.04	C
ATOM	679	C	MET	93	14.486	16.749	12.151	1.00	5.63	C
ATOM	680	O	MET	93	14.613	15.960	11.213	1.00	6.88	O
ATOM	681	N	LEU	94	15.094	17.933	12.190	1.00	6.44	N
ATOM	682	CA	LEU	94	15.994	18.376	11.129	1.00	6.81	C

ATOM	683	CB	LEU	94	15.779	19.863	10.841	1.00	6.92	C
ATOM	684	CG	LEU	94	16.681	20.505	9.783	1.00	7.48	C
ATOM	685	CD1	LEU	94	16.480	19.828	8.426	1.00	7.45	C
ATOM	686	CD2	LEU	94	16.348	21.986	9.687	1.00	7.77	C
ATOM	687	C	LEU	94	17.433	18.131	11.570	1.00	7.32	C
ATOM	688	O	LEU	94	17.929	18.785	12.487	1.00	6.78	O
ATOM	689	N	ASP	95	18.088	17.183	10.903	1.00	7.35	N
ATOM	690	CA	ASP	95	19.463	16.783	11.193	1.00	9.41	C
ATOM	691	CB	ASP	95	19.661	15.352	10.679	1.00	11.64	C
ATOM	692	CG	ASP	95	20.942	14.722	11.156	1.00	16.59	C
ATOM	693	OD1	ASP	95	21.989	15.399	11.135	1.00	17.98	O
ATOM	694	OD2	ASP	95	20.897	13.531	11.536	1.00	19.83	O
ATOM	695	C	ASP	95	20.440	17.731	10.496	1.00	9.92	C
ATOM	696	O	ASP	95	20.558	17.708	9.271	1.00	10.78	O
ATOM	697	N	LEU	96	21.135	18.554	11.280	1.00	8.40	N
ATOM	698	CA	LEU	96	22.093	19.522	10.745	1.00	11.08	C
ATOM	699	CB	LEU	96	21.756	20.920	11.273	1.00	10.70	C
ATOM	700	CG	LEU	96	20.377	21.444	10.846	1.00	10.46	C
ATOM	701	CD1	LEU	96	19.949	22.607	11.726	1.00	9.85	C
ATOM	702	CD2	LEU	96	20.436	21.862	9.386	1.00	9.48	C
ATOM	703	C	LEU	96	23.523	19.154	11.129	1.00	11.80	C
ATOM	704	O	LEU	96	23.929	19.327	12.279	1.00	12.48	O
ATOM	705	N	GLU	97	24.285	18.657	10.159	1.00	12.16	N
ATOM	706	CA	GLU	97	25.662	18.252	10.413	1.00	12.48	C
ATOM	707	CB	GLU	97	25.675	16.889	11.110	1.00	14.58	C
ATOM	708	CG	GLU	97	25.201	15.747	10.223	1.00	17.81	C
ATOM	709	CD	GLU	97	25.106	14.425	10.961	1.00	19.32	C
ATOM	710	OE1	GLU	97	24.086	14.184	11.638	1.00	19.77	O
ATOM	711	OE2	GLU	97	26.060	13.627	10.872	1.00	22.76	O
ATOM	712	C	GLU	97	26.453	18.164	9.112	1.00	12.93	C
ATOM	713	O	GLU	97	25.927	18.438	8.030	1.00	13.04	O
ATOM	714	N	SER	98	27.720	17.782	9.220	1.00	12.65	N
ATOM	715	CA	SER	98	28.569	17.650	8.043	1.00	12.98	C
ATOM	716	CB	SER	98	30.042	17.702	8.443	1.00	12.39	C
ATOM	717	OG	SER	98	30.391	16.536	9.169	1.00	14.82	O
ATOM	718	C	SER	98	28.283	16.304	7.390	1.00	13.56	C
ATOM	719	O	SER	98	27.640	15.439	7.986	1.00	14.02	O
ATOM	720	N	GLU	99	28.761	16.132	6.163	1.00	13.41	N
ATOM	721	CA	GLU	99	28.570	14.879	5.449	1.00	13.71	C
ATOM	722	CB	GLU	99	27.261	14.895	4.653	1.00	13.85	C
ATOM	723	CG	GLU	99	27.050	13.613	3.856	1.00	14.30	C
ATOM	724	CD	GLU	99	25.677	13.507	3.226	1.00	15.87	C
ATOM	725	OE1	GLU	99	25.371	14.284	2.297	1.00	16.80	O
ATOM	726	OE2	GLU	99	24.901	12.637	3.665	1.00	17.1b	O
ATOM	727	C	GLU	99	29.723	14.585	4.496	1.00	14.45	C
ATOM	728	O	GLU	99	30.249	15.487	3.848	1.00	15.24	O
ATOM	729	N	GLY	100	30.105	13.312	4.432	1.00	15.85	N
ATOM	730	CA	GLY	100	31.168	12.867	3.543	1.00	17.14	C
ATOM	731	C	GLY	100	32.491	13.601	3.623	1.00	19.17	C
ATOM	732	O	GLY	100	33.178	13.741	2.608	1.00	16.95	O
ATOM	733	N	SER	101	32.841	14.052	4.827	1.00	20.36	N
ATOM	734	CA	SER	101	34.079	14.783	5.104	1.00	22.25	C
ATOM	735	CB	SER	101	35.302	13.920	4.763	1.00	22.75	C
ATOM	736	OG	SER	101	35.441	13.737	3.367	1.00	21.73	O
ATOM	737	C	SER	101	34.183	16.128	4.381	1.00	22.33	C
ATOM	738	O	SER	101	35.258	16.722	4.306	1.00	24.91	O
ATOM	739	N	ASN	102	33.060	16.611	3.863	1.00	20.29	N

ATOM	740	CA	ASN	102	33.025	17.883	3.151	1.00	19.45	C
ATOM	741	CB	ASN	102	31.865	17.882	2.163	1.00	20.29	C
ATOM	742	CG	ASN	102	31.970	16.768	1.151	1.00	22.61	C
ATOM	743	OD1	ASN	102	30.965	16.320	0.607	1.00	21.85	O
ATOM	744	ND2	ASN	102	33.193	16.322	0.882	1.00	25.27	N
ATOM	745	C	ASN	102	32.840	19.032	4.134	1.00	16.65	C
ATOM	746	O	ASN	102	32.553	18.807	5.310	1.00	14.93	O
ATOM	747	N	PRO	103	33.007	20.281	3.663	1.00	15.24	N
ATOM	748	CD	PRO	103	33.455	20.704	2.323	1.00	15.83	C
ATOM	749	CA	PRO	103	32.838	21.438	4.544	1.00	13.71	C
ATOM	750	CB	PRO	103	32.811	22.604	3.566	1.00	14.54	C
ATOM	751	CG	PRO	103	33.834	22.162	2.546	1.00	15.09	C
ATOM	752	C	PRO	103	31.545	21.301	5.340	1.00	13.55	C
ATOM	753	O	PRO	103	30.459	21.174	4.771	1.00	12.40	O
ATOM	754	N	ALA	104	31.681	21.328	6.659	1.00	12.69	N
ATOM	755	CA	ALA	104	30.556	21.175	7.569	1.00	12.44	C
ATOM	756	CB	ALA	104	31.052	21.272	9.008	1.00	14.24	C
ATOM	757	C	ALA	104	29.404	22.147	7.361	1.00	11.92	C
ATOM	758	O	ALA	104	28.246	21.783	7.562	1.00	12.67	O
ATOM	759	N	CYS	105	29.710	23.374	6.952	1.00	11.15	N
ATOM	760	CA	CYS	105	28.671	24.385	6.781	1.00	11.59	C
ATOM	761	C	CYS	105	28.096	24.539	5.376	1.00	10.37	C
ATOM	762	O	CYS	105	27.450	25.538	5.066	1.00	10.36	O
ATOM	763	CB	CYS	105	29.184	25.727	7.300	1.00	10.75	C
ATOM	764	SG	CYS	105	29.892	25.613	8.978	1.00	12.64	S
ATOM	765	N	TRP	106	28.342	23.542	4.534	1.00	11.34	N
ATOM	766	CA	TRP	106	27.814	23.504	3.175	1.00	12.48	C
ATOM	767	CB	TRP	106	26.331	23.119	3.232	1.00	12.59	C
ATOM	768	CG	TRP	106	26.088	21.843	3.995	1.00	11.43	C
ATOM	769	CD2	TRP	106	25.775	20.561	3.440	1.00	12.11	C
ATOM	770	CE2	TRP	106	25.676	19.651	4.517	1.00	11.50	C
ATOM	771	CE3	TRP	106	25.569	20.092	2.137	1.00	12.94	C
ATOM	772	CD1	TRP	106	26.162	21.665	5.350	1.00	11.44	C
ATOM	773	NE1	TRP	106	25.917	20.350	5.670	1.00	11.48	N
ATOM	774	CZ2	TRP	106	25.382	18.296	4.329	1.00	12.74	C
ATOM	775	CZ3	TRP	106	25.275	18.743	1.949	1.00	12.96	C
ATOM	776	CH2	TRP	106	25.185	17.862	3.042	1.00	10.95	C
ATOM	777	C	TRP	106	27.993	24.763	2.330	1.00	12.91	C
ATOM	778	O	TRP	106	27.162	25.064	1.468	1.00	13.24	O
ATOM	779	N	GLY	107	29.080	25.491	2.570	1.00	12.98	N
ATOM	780	CA	GLY	107	29.354	26.694	1.800	1.00	12.70	C
ATOM	781	C	GLY	107	28.491	27.907	2.095	1.00	12.55	C
ATOM	782	O	GLY	107	28.514	28.884	1.343	1.00	14.03	O
ATOM	783	N	LEU	108	27.729	27.862	3.182	1.00	12.18	N
ATOM	784	CA	LEU	108	26.867	28.980	3.541	1.00	11.91	C
ATOM	785	CB	LEU	108	25.497	28.478	3.996	1.00	12.16	C
ATOM	786	CG	LEU	108	24.697	27.592	3.048	1.00	12.23	C
ATOM	787	CD1	LEU	108	23.367	27.239	3.701	1.00	12.73	C
ATOM	788	CD2	LEU	108	24.477	28.315	1.727	1.00	11.55	C
ATOM	789	C	LEU	108	27.457	29.815	4.662	1.00	11.84	C
ATOM	790	O	LEU	108	28.222	29.318	5.485	1.00	12.67	O
ATOM	791	N	SER	109	27.094	31.093	4.691	1.00	11.48	N
ATOM	792	CA	SER	109	27.562	31.976	5.746	1.00	11.80	C
ATOM	793	CB	SER	109	27.372	33.438	5.344	1.00	12.41	C
ATOM	794	OG	SER	109	26.002	33.721	5.128	1.00	13.81	O
ATOM	795	C	SER	109	26.684	31.655	6.948	1.00	12.71	C
ATOM	796	O	SER	109	25.676	30.965	6.811	1.00	11.99	O

ATOM	797	N	ALA	110	27.059	32.153	8.119	1.00	12.40	N
ATOM	798	CA	ALA	110	26.277	31.892	9.322	1.00	12.68	C
ATOM	799	CB	ALA	110	26.935	32.550	10.525	1.00	13.98	C
ATOM	800	C	ALA	110	24.853	32.408	9.157	1.00	12.88	C
ATOM	801	O	ALA	110	23.889	31.711	9.485	1.00	12.51	O
ATOM	802	N	ALA	111	24.722	33.630	8.646	1.00	12.72	N
ATOM	803	CA	ALA	111	23.412	34.233	8.448	1.00	12.68	C
ATOM	804	CB	ALA	111	23.562	35.682	7.991	1.00	14.26	C
ATOM	805	C	ALA	111	22.589	33.449	7.432	1.00	11.92	C
ATOM	806	O	ALA	111	21.398	33.219	7.635	1.00	11.82	O
ATOM	807	N	SER	112	23.215	33.038	6.335	1.00	10.69	N
ATOM	808	CA	SER	112	22.487	32.284	5.321	1.00	9.03	C
ATOM	809	CB	SER	112	23.316	32.167	4.044	1.00	9.11	C
ATOM	810	OG	SER	112	23.366	33.417	3.377	1.00	11.76	O
ATOM	811	C	SER	112	22.105	30.899	5.830	1.00	9.46	C
ATOM	812	O	SER	112	21.072	30.354	5.444	1.00	10.02	O
ATOM	813	N	MET	113	22.934	30.323	6.693	1.00	8.21	N
ATOM	814	CA	MET	113	22.615	29.010	7.238	1.00	8.01	C
ATOM	815	CB	MET	113	23.794	28.443	8.033	1.00	8.84	C
ATOM	816	CG	MET	113	23.511	27.084	8.674	1.00	7.86	C
ATOM	817	SD	MET	113	23.122	25.750	7.533	1.00	9.02	S
ATOM	818	CE	MET	113	24.756	25.337	6.922	1.00	8.92	C
ATOM	819	C	MET	113	21.401	29.148	8.152	1.00	7.80	C
ATOM	820	O	MET	113	20.483	28.332	8.100	1.00	8.35	O
ATOM	821	N	VAL	114	21.400	30.177	8.995	1.00	7.22	N
ATOM	822	CA	VAL	114	20.274	30.404	9.896	1.00	7.92	C
ATOM	823	CB	VAL	114	20.519	31.618	10.827	1.00	6.79	C
ATOM	824	CG1	VAL	114	19.259	31.939	11.621	1.00	6.97	C
ATOM	825	CG2	VAL	114	21.666	31.303	11.789	1.00	8.28	C
ATOM	826	C	VAL	114	19.009	30.642	9.071	1.00	8.24	C
ATOM	827	O	VAL	114	17.944	30.111	9.386	1.00	8.25	O
ATOM	828	N	ALA	115	19.134	31.435	8.011	1.00	7.95	N
ATOM	829	CA	ALA	115	17.998	31.721	7.146	1.00	8.63	C
ATOM	830	CB	ALA	115	18.393	32.732	6.077	1.00	9.81	C
ATOM	831	C	ALA	115	17.486	30.443	6.493	1.00	8.99	C
ATOM	832	O	ALA	115	16.278	30.249	6.362	1.00	9.04	O
ATOM	833	N	TRP	116	18.401	29.569	6.083	1.00	8.48	N
ATOM	834	CA	TRP	116	17.994	28.323	5.450	1.00	8.61	C
ATOM	835	CB	TRP	116	19.202	27.554	4.907	1.00	8.45	C
ATOM	836	CG	TRP	116	18.784	26.358	4.108	1.00	8.04	C
ATOM	837	CD2	TRP	116	18.503	25.048	4.611	1.00	7.81	C
ATOM	838	CE2	TRP	116	18.041	24.272	3.524	1.00	8.57	C
ATOM	839	CE3	TRP	116	18.591	24.455	5.876	1.00	9.11	C
ATOM	840	CD1	TRP	116	18.496	26.323	2.771	1.00	8.03	C
ATOM	841	NE1	TRP	116	18.047	25.075	2.414	1.00	9.19	N
ATOM	842	CZ2	TRP	116	17.669	22.931	3.664	1.00	8.59	C
ATOM	843	CZ3	TRP	116	18.219	23.118	6.016	1.00	9.33	C
ATOM	844	CH2	TRP	116	17.764	22.373	4.915	1.00	8.62	C
ATOM	845	C	TRP	116	17.242	27.453	6.452	1.00	9.42	C
ATOM	846	O	TRP	116	16.190	26.901	6.136	1.00	8.11	O
ATOM	847	N	ILE	117	17.787	27.327	7.658	1.00	8.19	N
ATOM	848	CA	ILE	117	17.142	26.536	8.700	1.00	8.06	C
ATOM	849	CB	ILE	117	18.009	26.516	9.985	1.00	7.05	C
ATOM	850	CG2	ILE	117	17.262	25.812	11.116	1.00	6.43	C
ATOM	851	CG1	ILE	117	19.330	25.796	9.695	1.00	9.17	C
ATOM	852	CD1	ILE	117	20.379	25.957	10.781	1.00	8.16	C
ATOM	853	C	ILE	117	15.753	27.113	9.005	1.00	7.42	C

ATOM	854	O	ILE	117	14.787	26.369	9.187	1.00	8.48	O
ATOM	855	N	LYS	118	15.646	28.437	9.051	1.00	7.34	N
ATOM	856	CA	LYS	118	14.357	29.061	9.324	1.00	7.93	C
ATOM	857	CB	LYS	118	14.522	30.563	9.577	1.00	8.03	C
ATOM	858	CG	LYS	118	13.227	31.247	10.019	1.00	11.16	C
ATOM	859	CD	LYS	118	13.467	32.684	10.469	1.00	14.38	C
ATOM	860	CE	LYS	118	12.196	33.301	11.043	1.00	18.09	C
ATOM	861	NZ	LYS	118	11.099	33.379	10.045	1.00	18.02	N
ATOM	862	C	LYS	118	13.399	28.825	8.159	1.00	7.50	C
ATOM	863	O	LYS	118	12.197	28.678	8.366	1.00	8.17	O
ATOM	864	N	ALA	119	13.929	28.777	6.938	1.00	7.55	N
ATOM	865	CA	ALA	119	13.087	28.532	5.769	1.00	7.12	C
ATOM	866	CB	ALA	119	13.909	28.644	4.482	1.00	7.90	C
ATOM	867	C	ALA	119	12.479	27.135	5.889	1.00	8.52	C
ATOM	868	O	ALA	119	11.296	26.936	5.613	1.00	9.40	O
ATOM	869	N	PHE	120	13.290	26.171	6.314	1.00	7.13	N
ATOM	870	CA	PHE	120	12.819	24.799	6.487	1.00	7.66	C
ATOM	871	CB	PHE	120	14.006	23.868	6.781	1.00	7.69	C
ATOM	872	CG	PHE	120	13.622	22.423	6.960	1.00	6.33	C
ATOM	873	CD1	PHE	120	12.971	21.998	8.115	1.00	6.13	C
ATOM	874	CD2	PHE	120	13.914	21.485	5.970	1.00	7.96	C
ATOM	875	CE1	PHE	120	12.617	20.659	8.284	1.00	6.17	C
ATOM	876	CE2	PHE	120	13.567	20.146	6.127	1.00	8.73	C
ATOM	877	CZ	PHE	120	12.917	19.731	7.285	1.00	7.33	C
ATOM	878	C	PHE	120	11.799	24.731	7.628	1.00	8.26	C
ATOM	879	O	PHE	120	10.699	24.190	7.466	1.00	8.88	O
ATOM	880	N	SER	121	12.169	25.294	8.776	1.00	7.32	N
ATOM	881	CA	SER	121	11.308	25.295	9.954	1.00	7.06	C
ATOM	882	CB	SER	121	12.043	25.934	11.135	1.00	7.72	C
ATOM	883	OG	SER	121	11.212	25.965	12.281	1.00	7.33	O
ATOM	884	C	SER	121	9.982	26.014	9.716	1.00	7.38	C
ATOM	885	O	SER	121	8.926	25.518	10.109	1.00	9.26	O
ATOM	886	N	ASP	122	10.033	27.182	9.082	1.00	8.25	N
ATOM	887	CA	ASP	122	8.807	27.924	8.808	1.00	9.59	C
ATOM	888	CB	ASP	122	9.108	29.250	8.106	1.00	9.64	C
ATOM	889	CG	ASP	122	9.691	30.297	9.041	1.00	9.98	C
ATOM	890	OD1	ASP	122	9.607	30.127	10.277	1.00	13.50	O
ATOM	891	OD2	ASP	122	10.216	31.304	8.530	1.00	12.76	O
ATOM	892	C	ASP	122	7.860	27.101	7.942	1.00	9.16	C
ATOM	893	O	ASP	122	6.662	27.024	8.227	1.00	11.16	O
ATOM	894	N	ARG	123	8.394	26.486	6.889	1.00	9.71	N
ATOM	895	CA	ARG	123	7.568	25.674	5.998	1.00	9.13	C
ATOM	896	CB	ARG	123	8.367	25.215	4.778	1.00	10.71	C
ATOM	897	CG	ARG	123	7.575	24.318	3.830	1.00	10.37	C
ATOM	898	CD	ARG	123	6.323	25.009	3.300	1.00	13.86	C
ATOM	899	NE	ARG	123	5.580	24.140	2.393	1.00	12.76	N
ATOM	900	CZ	ARG	123	4.399	24.445	1.866	1.00	14.47	C
ATOM	901	NH1	ARG	123	3.818	25.604	2.154	1.00	15.13	N
ATOM	902	NH2	ARG	123	3.798	23.590	1.049	1.00	15.60	N
ATOM	903	C	ARG	123	7.029	24.463	6.737	1.00	9.28	C
ATOM	904	O	ARG	123	5.854	24.125	6.613	1.00	10.22	O
ATOM	905	N	TYR	124	7.888	23.806	7.505	1.00	6.79	N
ATOM	906	CA	TYR	124	7.453	22.641	8.254	1.00	6.94	C
ATOM	907	CB	TYR	124	8.614	22.052	9.062	1.00	7.33	C
ATOM	908	CG	TYR	124	8.278	20.702	9.662	1.00	7.75	C
ATOM	909	CD1	TYR	124	8.480	19.523	8.940	1.00	6.23	C
ATOM	910	CE1	TYR	124	8.104	18.285	9.463	1.00	7.54	C

ATOM	911	CD2	TYR	124	7.696	20.606	10.924	1.00	7.58	C
ATOM	912	CE2	TYR	124	7.316	19.374	11.454	1.00	8.43	C
ATOM	913	CZ	TYR	124	7.522	18.220	10.718	1.00	7.52	C
ATOM	914	OH	TYR	124	7.133	17.003	11.234	1.00	8.66	O
ATOM	915	C	TYR	124	6.311	23.020	9.198	1.00	7.77	C
ATOM	916	O	TYR	124	5.336	22.278	9.334	1.00	8.15	O
ATOM	917	N	HIS	125	6.427	24.182	9.839	1.00	7.39	N
ATOM	918	CA	HIS	125	5.405	24.635	10.778	1.00	10.40	C
ATOM	919	CB	HIS	125	5.931	25.808	11.614	1.00	11.68	C
ATOM	920	CG	HIS	125	4.944	26.332	12.612	1.00	13.90	C
ATOM	921	CD2	HIS	125	4.655	25.932	13.873	1.00	14.26	C
ATOM	922	ND1	HIS	125	4.101	27.389	12.344	1.00	17.21	N
ATOM	923	CE1	HIS	125	3.337	27.619	13.397	1.00	16.61	C
ATOM	924	NE2	HIS	125	3.653	26.748	14.339	1.00	16.39	N
ATOM	925	C	HIS	125	4.120	25.032	10.068	1.00	9.89	C
ATOM	926	O	HIS	125	3.026	24.792	10.579	1.00	12.46	O
ATOM	927	N	ALA	126	4.253	25.636	8.892	1.00	10.60	N
ATOM	928	CA	ALA	126	3.082	26.048	8.128	1.00	12.50	C
ATOM	929	CB	ALA	126	3.508	26.873	6.924	1.00	13.38	C
ATOM	930	C	ALA	126	2.288	24.830	7.673	1.00	14.17	C
ATOM	931	O	ALA	126	1.057	24.844	7.676	1.00	15.28	O
ATOM	932	N	VAL	127	3.004	23.774	7.300	1.00	13.66	N
ATOM	933	CA	VAL	127	2.387	22.541	6.820	1.00	11.54	C
ATOM	934	CB	VAL	127	3.396	21.723	5.960	1.00	11.98	C
ATOM	935	CG1	VAL	127	2.814	20.361	5.601	1.00	12.97	C
ATOM	936	CG2	VAL	127	3.735	22.492	4.693	1.00	12.43	C
ATOM	937	C	VAL	127	1.832	21.636	7.922	1.00	12.06	C
ATOM	938	O	VAL	127	0.714	21.133	7.807	1.00	11.97	O
ATOM	939	N	THR	128	2.599	21.435	8.990	1.00	10.05	N
ATOM	940	CA	THR	128	2.174	20.544	10.068	1.00	10.49	C
ATOM	941	CB	THR	128	3.345	19.694	10.592	1.00	10.58	C
ATOM	942	OG1	THR	128	4.235	20.530	11.342	1.00	10.92	O
ATOM	943	CG2	THR	128	4.100	19.056	9.444	1.00	9.25	C
ATOM	944	C	THR	128	1.549	21.182	11.299	1.00	10.99	C
ATOM	945	O	THR	128	0.824	20.514	12.032	1.00	11.73	O
ATOM	946	N	GLY	129	1.842	22.455	11.538	1.00	11.68	N
ATOM	947	CA	GLY	129	1.317	23.116	12.717	1.00	12.37	C
ATOM	948	C	GLY	129	2.286	22.965	13.878	1.00	12.39	C
ATOM	949	O	GLY	129	2.050	23.484	14.966	1.00	12.70	O
ATOM	950	N	ARG	130	3.386	22.251	13.642	1.00	11.30	N
ATOM	951	CA	ARG	130	4.402	22.032	14.670	1.00	10.15	C
ATOM	952	CB	ARG	130	4.544	20.536	15.002	1.00	11.13	C
ATOM	953	CG	ARG	130	3.261	19.780	15.352	1.00	11.56	C
ATOM	954	CD	ARG	130	2.542	20.370	16.551	1.00	9.95	C
ATOM	955	NE	ARG	130	3.365	20.442	17.758	1.00	11.57	N
ATOM	956	CZ	ARG	130	3.633	19.419	18.567	1.00	11.07	C
ATOM	957	NH1	ARG	130	3.147	18.209	18.317	1.00	10.76	N
ATOM	958	NH2	ARG	130	4.386	19.613	19.640	1.00	13.46	N
ATOM	959	C	ARG	130	5.761	22.519	14.175	1.00	9.49	C
ATOM	960	O	ARG	130	6.048	22.471	12.981	1.00	10.88	O
ATOM	961	N	TYR	131	6.594	22.994	15.095	1.00	8.77	N
ATOM	962	CA	TYR	131	7.942	23.413	14.726	1.00	8.67	C
ATOM	963	CB	TYR	131	8.480	24.445	15.716	1.00	10.31	C
ATOM	964	CG	TYR	131	7.948	25.835	15.476	1.00	10.36	C
ATOM	965	CD1	TYR	131	8.337	26.563	14.353	1.00	11.48	C
ATOM	966	CE1	TYR	131	7.837	27.840	14.115	1.00	14.69	C
ATOM	967	CD2	TYR	131	7.042	26.418	16.362	1.00	12.79	C

ATOM	968	CE2	TYR	131	6.535	27.698	16.131	1.00	14.61	C
ATOM	969	CZ	TYR	131	6.937	28.398	15.006	1.00	15.11	C
ATOM	970	OH	TYR	131	6.437	29.658	14.767	1.00	18.50	O
ATOM	971	C	TYR	131	8.807	22.159	14.774	1.00	7.59	C
ATOM	972	O	TYR	131	8.671	21.337	15.680	1.00	9.11	O
ATOM	973	N	PRO	132	9.705	21.989	13.794	1.00	7.03	N
ATOM	974	CD	PRO	132	9.996	22.833	12.619	1.00	7.21	C
ATOM	975	CA	PRO	132	10.551	20.794	13.811	1.00	7.81	C
ATOM	976	CB	PRO	132	11.161	20.785	12.414	1.00	7.47	C
ATOM	977	CG	PRO	132	11.319	22.263	12.122	1.00	6.61	C
ATOM	978	C	PRO	132	11.617	20.867	14.894	1.00	7.46	C
ATOM	979	O	PRO	132	12.041	21.956	15.289	1.00	8.17	O
ATOM	980	N	MET	133	12.030	19.709	15.392	1.00	7.51	N
ATOM	981	CA	MET	133	13.081	19.668	16.397	1.00	7.04	C
ATOM	982	CB	MET	133	13.096	18.309	17.103	1.00	7.69	C
ATOM	983	CG	MET	133	11.754	17.929	17.706	1.00	8.60	C
ATOM	984	SD	MET	133	11.887	16.632	18.935	1.00	8.88	S
ATOM	985	CE	MET	133	12.255	15.215	17.899	1.00	9.21	C
ATOM	986	C	MET	133	14.364	19.862	15.599	1.00	7.05	C
ATOM	987	O	MET	133	14.458	19.395	14.462	1.00	7.83	O
ATOM	988	N	LEU	134	15.340	20.550	16.184	1.00	6.41	N
ATOM	989	CA	LEU	134	16.610	20.805	15.507	1.00	5.87	C
ATOM	990	CB	LEU	134	16.941	22.299	15.562	1.00	6.54	C
ATOM	991	CG	LEU	134	15.911	23.221	14.900	1.00	5.82	C
ATOM	992	CD1	LEU	134	16.348	24.667	15.057	1.00	8.34	C
ATOM	993	CD2	LEU	134	15.758	22.867	13.425	1.00	8.50	C
ATOM	994	C	LEU	134	17.735	19.996	16.148	1.00	6.16	C
ATOM	995	O	LEU	134	18.008	20.129	17.339	1.00	7.25	O
ATOM	996	N	TYR	135	18.384	19.167	15.336	1.00	6.39	N
ATOM	997	CA	TYR	135	19.475	18.304	15.788	1.00	8.04	C
ATOM	998	CB	TYR	135	19.268	16.890	15.227	1.00	7.74	C
ATOM	999	CG	TYR	135	20.455	15.960	15.371	1.00	8.08	C
ATOM	1000	CD1	TYR	135	21.528	16.018	14.481	1.00	8.70	C
ATOM	1001	CE1	TYR	135	22.615	15.159	14.609	1.00	11.66	C
ATOM	1002	CD2	TYR	135	20.503	15.019	16.395	1.00	9.14	C
ATOM	1003	CE2	TYR	135	21.586	14.157	16.533	1.00	9.00	C
ATOM	1004	CZ	TYR	135	22.636	14.230	15.639	1.00	10.36	C
ATOM	1005	OH	TYR	135	23.700	13.372	15.772	1.00	11.69	O
ATOM	1006	C	TYR	135	20.828	18.840	15.356	1.00	8.72	C
ATOM	1007	O	TYR	135	21.008	19.224	14.203	1.00	9.02	O
ATOM	1008	N	THR	136	21.785	18.841	16.280	1.00	8.56	N
ATOM	1009	CA	THR	136	23.117	19.346	15.982	1.00	10.22	C
ATOM	1010	CB	THR	136	23.062	20.872	15.731	1.00	10.60	C
ATOM	1011	OG1	THR	136	24.321	21.332	15.225	1.00	12.88	O
ATOM	1012	CG2	THR	136	22.752	21.609	17.023	1.00	10.55	C
ATOM	1013	C	THR	136	24.064	19.090	17.149	1.00	11.19	C
ATOM	1014	O	THR	136	23.637	18.701	18.234	1.00	10.92	O
ATOM	1015	N	ASN	137	25.356	19.279	16.912	1.00	13.30	N
ATOM	1016	CA	ASN	137	26.330	19.144	17.986	1.00	15.44	C
ATOM	1017	CB	ASN	137	27.444	18.148	17.630	1.00	17.06	C
ATOM	1018	CG	ASN	137	28.286	18.587	16.455	1.00	18.45	C
ATOM	1019	OD1	ASN	137	28.911	19.644	16.484	1.00	18.41	O
ATOM	1020	ND2	ASN	137	28.320	17.764	15.415	1.00	22.45	N
ATOM	1021	C	ASN	137	26.863	20.564	18.162	1.00	14.72	C
ATOM	1022	O	ASN	137	26.771	21.382	17.243	1.00	13.16	O
ATOM	1023	N	PRO	138	27.398	20.889	19.348	1.00	14.33	N
ATOM	1024	CD	PRO	138	27.467	20.040	20.550	1.00	16.43	C

ATOM	1025	CA	PRO	138	27.929	22.227	19.630	1.00	14.09	C
ATOM	1026	CB	PRO	138	28.512	22.071	21.033	1.00	16.12	C
ATOM	1027	CG	PRO	138	27.587	21.067	21.652	1.00	16.74	C
ATOM	1028	C	PRO	138	28.946	22.780	18.630	1.00	12.70	C
ATOM	1029	O	PRO	138	28.860	23.942	18.237	1.00	13.09	O
ATOM	1030	N	SER	139	29.906	21.955	18.225	1.00	11.97	N
ATOM	1031	CA	SER	139	30.927	22.393	17.279	1.00	11.57	C
ATOM	1032	CB	SER	139	31.886	21.242	16.975	1.00	13.31	C
ATOM	1033	OG	SER	139	32.924	21.666	16.111	1.00	16.34	O
ATOM	1034	C	SER	139	30.302	22.894	15.981	1.00	12.08	C
ATOM	1035	O	SER	139	30.666	23.957	15.468	1.00	11.55	O
ATOM	1036	N	TRP	140	29.356	22.125	15.459	1.00	10.07	N
ATOM	1037	CA	TRP	140	28.684	22.486	14.219	1.00	10.29	C
ATOM	1038	CB	TRP	140	27.782	21.342	13.752	1.00	9.52	C
ATOM	1039	CG	TRP	140	27.299	21.509	12.343	1.00	10.90	C
ATOM	1040	CD2	TRP	140	26.170	22.277	11.903	1.00	9.95	C
ATOM	1041	CE2	TRP	140	26.123	22.180	10.494	1.00	10.13	C
ATOM	1042	CE3	TRP	140	25.195	23.040	12.564	1.00	8.93	C
ATOM	1043	CD1	TRP	140	27.872	20.993	11.214	1.00	10.85	C
ATOM	1044	NE1	TRP	140	27.172	21.391	10.100	1.00	11.75	N
ATOM	1045	CZ2	TRP	140	25.138	22.818	9.732	1.00	10.75	C
ATOM	1046	CZ3	TRP	140	24.214	23.675	11.805	1.00	9.27	C
ATOM	1047	CH2	TRP	140	24.196	23.559	10.402	1.00	11.27	C
ATOM	1048	C	TRP	140	27.849	23.754	14.369	1.00	10.70	C
ATOM	1049	O	TRP	140	27.906	24.645	13.523	1.00	11.46	O
ATOM	1050	N	TRP	141	27.070	23.840	15.444	1.00	9.97	N
ATOM	1051	CA	TRP	141	26.228	25.011	15.650	1.00	9.68	C
ATOM	1052	CB	TRP	141	25.329	24.813	16.878	1.00	10.68	C
ATOM	1053	CG	TRP	141	24.122	25.718	16.881	1.00	8.42	C
ATOM	1054	CD2	TRP	141	22.961	25.601	16.046	1.00	7.98	C
ATOM	1055	CE2	TRP	141	22.108	26.683	16.362	1.00	8.89	C
ATOM	1056	CE3	TRP	141	22.561	24.688	15.060	1.00	7.20	C
ATOM	1057	CD1	TRP	141	23.929	26.832	17.648	1.00	9.09	C
ATOM	1058	NE1	TRP	141	22.722	27.418	17.342	1.00	9.21	N
ATOM	1059	CZ2	TRP	141	20.875	26.877	15.725	1.00	8.73	C
ATOM	1060	CZ3	TRP	141	21.332	24.884	14.426	1.00	8.59	C
ATOM	1061	CH2	TRP	141	20.509	25.970	14.764	1.00	8.69	C
ATOM	1062	C	TRP	141	27.056	26.285	15.797	1.00	11.26	C
ATOM	1063	O	TRP	141	26.698	27.332	15.258	1.00	10.54	O
ATOM	1064	N	SER	142	28.169	26.193	16.516	1.00	12.53	N
ATOM	1065	CA	SER	142	29.037	27.349	16.717	1.00	12.96	C
ATOM	1066	CB	SER	142	30.201	26.986	17.647	1.00	14.87	C
ATOM	1067	OG	SER	142	29.742	26.641	18.939	1.00	17.17	O
ATOM	1068	C	SER	142	29.602	27.884	15.405	1.00	12.97	C
ATOM	1069	O	SER	142	29.451	29.062	15.087	1.00	14.08	O
ATOM	1070	N	SER	143	30.241	27.011	14.635	1.00	13.39	N
ATOM	1071	CA	SER	143	30.849	27.428	13.378	1.00	15.69	C
ATOM	1072	CB	SER	143	31.887	26.392	12.936	1.00	18.98	C
ATOM	1073	OG	SER	143	31.321	25.099	12.858	1.00	25.36	O
ATOM	1074	C	SER	143	29.885	27.703	12.227	1.00	15.23	C
ATOM	1075	O	SER	143	30.105	28.628	11.443	1.00	15.60	O
ATOM	1076	N	CYS	144	28.813	26.923	12.128	1.00	12.81	N
ATOM	1077	CA	CYS	144	27.872	27.098	11.026	1.00	11.81	C
ATOM	1078	C	CYS	144	26.728	28.102	11.200	1.00	12.14	C
ATOM	1079	O	CYS	144	26.150	28.545	10.207	1.00	11.97	O
ATOM	1080	CB	CYS	144	27.300	25.740	10.618	1.00	12.90	C
ATOM	1081	SG	CYS	144	28.534	24.527	10.033	1.00	11.05	S

ATOM	1082	N	THR	145	26.387	28.461	12.436	1.00	10.88	N
ATOM	1083	CA	THR	145	25.309	29.428	12.657	1.00	11.44	C
ATOM	1084	CB	THR	145	24.080	28.797	13.358	1.00	10.12	C
ATOM	1085	OG1	THR	145	24.367	28.595	14.748	1.00	9.23	O
ATOM	1086	CG2	THR	145	23.721	27.468	12.722	1.00	11.16	C
ATOM	1087	C	THR	145	25.773	30.587	13.528	1.00	11.71	C
ATOM	1088	O	THR	145	24.991	31.481	13.855	1.00	11.95	O
ATOM	1089	N	GLY	146	27.047	30.577	13.902	1.00	12.45	N
ATOM	1090	CA	GLY	146	27.551	31.632	14.761	1.00	12.61	C
ATOM	1091	C	GLY	146	26.906	31.492	16.129	1.00	13.93	C
ATOM	1092	O	GLY	146	26.699	32.480	16.836	1.00	13.23	O
ATOM	1093	N	ASN	147	26.589	30.252	16.494	1.00	12.95	N
ATOM	1094	CA	ASN	147	25.953	29.937	17.775	1.00	13.14	C
ATOM	1095	CB	ASN	147	26.882	30.299	18.938	1.00	12.93	C
ATOM	1096	CG	ASN	147	26.584	29.496	20.192	1.00	15.55	C
ATOM	1097	OD1	ASN	147	26.911	29.912	21.305	1.00	19.35	O
ATOM	1098	ND2	ASN	147	25.979	28.329	20.015	1.00	11.08	N
ATOM	1099	C	ASN	147	24.643	30.712	17.902	1.00	12.82	C
ATOM	1100	O	ASN	147	24.360	31.322	18.933	1.00	13.45	O
ATOM	1101	N	SER	148	23.840	30.658	16.844	1.00	11.36	N
ATOM	1102	CA	SER	148	22.567	31.370	16.775	1.00	10.74	C
ATOM	1103	CB	SER	148	21.987	31.225	15.369	1.00	11.75	C
ATOM	1104	OG	SER	148	20.688	31.790	15.296	1.00	13.51	O
ATOM	1105	C	SER	148	21.489	30.979	17.781	1.00	10.22	C
ATOM	1106	O	SER	148	21.299	29.801	18.067	1.00	9.71	O
ATOM	1107	N	ASN	149	20.777	31.982	18.294	1.00	10.62	N
ATOM	1108	CA	ASN	149	19.682	31.759	19.238	1.00	10.17	C
ATOM	1109	CB	ASN	149	19.806	32.683	20.458	1.00	10.88	C
ATOM	1110	CG	ASN	149	19.823	34.156	20.086	1.00	12.09	C
ATOM	1111	OD1	ASN	149	19.456	34.540	18.975	1.00	13.74	O
ATOM	1112	ND2	ASN	149	20.239	34.995	21.031	1.00	10.21	N
ATOM	1113	C	ASN	149	18.346	32.025	18.547	1.00	10.77	C
ATOM	1114	O	ASN	149	17.326	32.229	19.200	1.00	10.13	O
ATOM	1115	N	ALA	150	18.356	32.005	17.219	1.00	9.11	N
ATOM	1116	CA	ALA	150	17.149	32.274	16.443	1.00	8.45	C
ATOM	1117	CB	ALA	150	17.482	32.274	14.951	1.00	9.23	C
ATOM	1118	C	ALA	150	15.980	31.327	16.693	1.00	9.27	C
ATOM	1119	O	ALA	150	14.823	31.731	16.569	1.00	9.22	O
ATOM	1120	N	PHE	151	16.272	30.081	17.056	1.00	8.82	N
ATOM	1121	CA	PHE	151	15.219	29.082	17.239	1.00	8.03	C
ATOM	1122	CB	PHE	151	15.573	27.849	16.408	1.00	9.35	C
ATOM	1123	CG	PHE	151	16.031	28.185	15.025	1.00	7.66	C
ATOM	1124	CD1	PHE	151	17.385	28.177	14.699	1.00	8.31	C
ATOM	1125	CD2	PHE	151	15.112	28.598	14.068	1.00	9.10	C
ATOM	1126	CE1	PHE	151	17.816	28.586	13.435	1.00	8.83	C
ATOM	1127	CE2	PHE	151	15.531	29.008	12.806	1.00	9.04	C
ATOM	1128	CZ	PHE	151	16.882	29.004	12.489	1.00	8.03	C
ATOM	1129	C	PHE	151	14.893	28.652	18.660	1.00	9.93	C
ATOM	1130	O	PHE	151	14.047	27.782	18.866	1.00	9.78	O
ATOM	1131	N	VAL	152	15.537	29.277	19.637	1.00	9.22	N
ATOM	1132	CA	VAL	152	15.334	28.916	21.033	1.00	10.09	C
ATOM	1133	CB	VAL	152	16.192	29.811	21.952	1.00	9.71	C
ATOM	1134	CG1	VAL	152	15.976	29.423	23.400	1.00	8.89	C
ATOM	1135	CG2	VAL	152	17.660	29.674	21.581	1.00	9.13	C
ATOM	1136	C	VAL	152	13.891	28.958	21.527	1.00	10.64	C
ATOM	1137	O	VAL	152	13.490	28.131	22.342	1.00	12.67	O
ATOM	1138	N	ASN	153	13.103	29.904	21.033	1.00	9.54	N

ATOM	1139	CA	ASN	153	11.726	30.020	21.494	1.00	10.43	C
ATOM	1140	CB	ASN	153	11.367	31.493	21.674	1.00	10.17	C
ATOM	1141	CG	ASN	153	12.159	32.140	22.783	1.00	10.94	C
ATOM	1142	OD1	ASN	153	13.367	32.342	22.663	1.00	12.96	O
ATOM	1143	ND2	ASN	153	11.485	32.452	23.883	1.00	14.70	N
ATOM	1144	C	ASN	153	10.666	29.329	20.645	1.00	10.99	C
ATOM	1145	O	ASN	153	9.470	29.479	20.900	1.00	13.22	O
ATOM	1146	N	THR	154	11.097	28.562	19.651	1.00	9.09	N
ATOM	1147	CA	THR	154	10.155	27.861	18.791	1.00	9.44	C
ATOM	1148	CB	THR	154	10.058	28.524	17.398	1.00	10.20	C
ATOM	1149	OG1	THR	154	11.374	28.745	16.878	1.00	10.88	O
ATOM	1150	CG2	THR	154	9.316	29.849	17.482	1.00	11.82	C
ATOM	1151	C	THR	154	10.479	26.385	18.573	1.00	10.36	C
ATOM	1152	O	THR	154	9.585	25.542	18.599	1.00	10.93	O
ATOM	1153	N	ASN	155	11.757	26.071	18.379	1.00	9.37	N
ATOM	1154	CA	ASN	155	12.163	24.695	18.094	1.00	8.71	C
ATOM	1155	CB	ASN	155	13.109	24.670	16.891	1.00	8.77	C
ATOM	1156	CG	ASN	155	12.580	25.451	15.711	1.00	8.67	C
ATOM	1157	OD1	ASN	155	12.541	26.675	15.737	1.00	8.74	O
ATOM	1158	ND2	ASN	155	12.168	24.742	14.669	1.00	7.88	N
ATOM	1159	C	ASN	155	12.856	23.926	19.207	1.00	8.69	C
ATOM	1160	O	ASN	155	13.800	24.422	19.811	1.00	10.15	O
ATOM	1161	N	PRO	156	12.395	22.693	19.487	1.00	7.30	N
ATOM	1162	CD	PRO	156	11.140	22.056	19.049	1.00	6.88	C
ATOM	1163	CA	PRO	156	13.049	21.907	20.538	1.00	7.41	C
ATOM	1164	CB	PRO	156	12.179	20.653	20.635	1.00	7.78	C
ATOM	1165	CG	PRO	156	10.830	21.129	20.200	1.00	9.95	C
ATOM	1166	C	PRO	156	14.461	21.563	20.041	1.00	7.30	C
ATOM	1167	O	PRO	156	14.661	21.332	18.848	1.00	8.38	O
ATOM	1168	N	LEU	157	15.429	21.518	20.952	1.00	7.23	N
ATOM	1169	CA	LEU	157	16.808	21.196	20.592	1.00	6.24	C
ATOM	1170	CB	LEU	157	17.786	22.075	21.386	1.00	7.62	C
ATOM	1171	CG	LEU	157	19.261	21.653	21.320	1.00	7.97	C
ATOM	1172	CD1	LEU	157	19.808	21.888	19.925	1.00	8.55	C
ATOM	1173	CD2	LEU	157	20.072	22.434	22.350	1.00	7.65	C
ATOM	1174	C	LEU	157	17.152	19.736	20.870	1.00	8.07	C
ATOM	1175	O	LEU	157	16.838	19.215	21.937	1.00	8.44	O
ATOM	1176	N	VAL	158	17.782	19.079	19.902	1.00	7.17	N
ATOM	1177	CA	VAL	158	18.236	17.705	20.082	1.00	8.67	C
ATOM	1178	CB	VAL	158	17.738	16.767	18.973	1.00	8.54	C
ATOM	1179	CG1	VAL	158	18.270	15.353	19.216	1.00	9.33	C
ATOM	1180	CG2	VAL	158	16.215	16.756	18.960	1.00	9.06	C
ATOM	1181	C	VAL	158	19.753	17.850	20.019	1.00	9.31	C
ATOM	1182	O	VAL	158	20.332	18.109	18.957	1.00	8.42	O
ATOM	1183	N	LEU	159	20.378	17.716	21.182	1.00	8.89	N
ATOM	1184	CA	LEU	159	21.814	17.885	21.328	1.00	10.13	C
ATOM	1185	CB	LEU	159	22.089	18.589	22.661	1.00	10.39	C
ATOM	1186	CG	LEU	159	23.532	18.887	23.063	1.00	13.47	C
ATOM	1187	CD1	LEU	159	24.226	19.662	21.960	1.00	15.51	C
ATOM	1188	CD2	LEU	159	23.533	19.684	24.363	1.00	14.33	C
ATOM	1189	C	LEU	159	22.593	16.583	21.251	1.00	8.30	C
ATOM	1190	O	LEU	159	22.341	15.655	22.013	1.00	8.21	O
ATOM	1191	N	ALA	160	23.545	16.532	20.324	1.00	8.55	N
ATOM	1192	CA	ALA	160	24.372	15.350	20.142	1.00	9.27	C
ATOM	1193	CB	ALA	160	24.502	15.024	18.654	1.00	10.42	C
ATOM	1194	C	ALA	160	25.761	15.508	20.758	1.00	11.18	C
ATOM	1195	O	ALA	160	26.545	16.355	20.337	1.00	12.42	O

ATOM	1196	N	ARG	161	26.044	14.692	21.767	1.00	12.02	N
ATOM	1197	CA	ARG	161	27.349	14.680	22.429	1.00	13.20	C
ATOM	1198	CB	ARG	161	27.497	15.822	23.437	1.00	15.56	C
ATOM	1199	CG	ARG	161	28.826	15.753	24.205	1.00	19.49	C
ATOM	1200	CD	ARG	161	29.104	17.006	25.023	1.00	22.61	C
ATOM	1201	NE	ARG	161	29.722	18.071	24.232	1.00	26.37	N
ATOM	1202	CZ	ARG	161	29.271	19.322	24.176	1.00	27.14	C
ATOM	1203	NH1	ARG	161	29.901	20.224	23.436	1.00	27.80	N
ATOM	1204	NH2	ARG	161	28.181	19.669	24.849	1.00	27.84	N
ATOM	1205	C	ARG	161	27.464	13.343	23.138	1.00	14.46	C
ATOM	1206	O	ARG	161	26.776	13.086	24.128	1.00	15.05	O
ATOM	1207	N	TYR	162	28.336	12.487	22.623	1.00	14.94	N
ATOM	1208	CA	TYR	162	28.503	11.160	23.192	1.00	16.83	C
ATOM	1209	CB	TYR	162	28.977	10.193	22.104	1.00	16.25	C
ATOM	1210	CG	TYR	162	28.124	10.247	20.846	1.00	13.69	C
ATOM	1211	CD1	TYR	162	26.811	10.731	20.887	1.00	14.37	C
ATOM	1212	CE1	TYR	162	26.025	10.784	19.738	1.00	13.39	C
ATOM	1213	CD2	TYR	162	28.623	9.815	19.619	1.00	15.17	C
ATOM	1214	CE2	TYR	162	27.843	9.863	18.462	1.00	14.26	C
ATOM	1215	CZ	TYR	162	26.547	10.350	18.528	1.00	14.82	C
ATOM	1216	OH	TYR	162	25.775	10.408	17.386	1.00	14.21	O
ATOM	1217	C	TYR	162	29.448	11.155	24.383	1.00	19.07	C
ATOM	1218	O	TYR	162	30.658	10.976	24.243	1.00	20.28	O
ATOM	1219	N	ALA	163	28.871	11.362	25.562	1.00	22.05	N
ATOM	1220	CA	ALA	163	29.628	11.394	26.804	1.00	22.85	C
ATOM	1221	CB	ALA	163	30.234	12.771	27.006	1.00	23.38	C
ATOM	1222	C	ALA	163	28.715	11.047	27.972	1.00	23.50	C
ATOM	1223	O	ALA	163	27.537	10.738	27.781	1.00	22.86	O
ATOM	1224	N	SER	164	29.264	11.098	29.181	1.00	23.62	N
ATOM	1225	CA	SER	164	28.502	10.789	30.384	1.00	23.18	C
ATOM	1226	CB	SER	164	29.447	10.611	31.574	1.00	24.21	C
ATOM	1227	OG	SER	164	30.132	11.818	31.855	1.00	27.00	O
ATOM	1228	C	SER	164	27.503	11.897	30.694	1.00	21.55	C
ATOM	1229	O	SER	164	26.514	11.674	31.392	1.00	20.39	O
ATOM	1230	N	ALA	165	27.770	13.091	30.171	1.00	20.88	N
ATOM	1231	CA	ALA	165	26.900	14.244	30.381	1.00	21.07	C
ATOM	1232	CB	ALA	165	27.475	15.136	31.474	1.00	22.97	C
ATOM	1233	C	ALA	165	26.761	15.028	29.077	1.00	20.36	C
ATOM	1234	O	ALA	165	27.658	15.010	28.237	1.00	20.51	O
ATOM	1235	N	PRO	166	25.630	15.731	28.894	1.00	19.80	N
ATOM	1236	CD	PRO	166	24.476	15.806	29.806	1.00	19.75	C
ATOM	1237	CA	PRO	166	25.383	16.517	27.680	1.00	19.57	C
ATOM	1238	CB	PRO	166	23.957	17.032	27.886	1.00	19.64	C
ATOM	1239	CG	PRO	166	23.821	17.085	29.371	1.00	21.95	C
ATOM	1240	C	PRO	166	26.383	17.636	27.385	1.00	18.87	C
ATOM	1241	O	PRO	166	26.616	17.968	26.224	1.00	19.90	O
ATOM	1242	N	GLY	167	26.965	18.217	28.427	1.00	18.65	N
ATOM	1243	CA	GLY	167	27.941	19.277	28.232	1.00	17.56	C
ATOM	1244	C	GLY	167	27.378	20.658	27.947	1.00	17.66	C
ATOM	1245	O	GLY	167	26.267	20.989	28.355	1.00	19.03	O
ATOM	1246	N	THR	168	28.157	21.472	27.241	1.00	16.62	N
ATOM	1247	CA	THR	168	27.747	22.832	26.907	1.00	16.11	C
ATOM	1248	CB	THR	168	28.914	23.618	26.277	1.00	18.36	C
ATOM	1249	OG1	THR	168	30.029	23.614	27.178	1.00	19.75	O
ATOM	1250	CG2	THR	168	28.504	25.056	26.013	1.00	18.00	C
ATOM	1251	C	THR	168	26.560	22.846	25.943	1.00	14.93	C
ATOM	1252	O	THR	168	26.593	22.203	24.894	1.00	15.87	O

ATOM	1253	N	ILE	169	25.511	23.575	26.314	1.00	12.56	N
ATOM	1254	CA	ILE	169	24.311	23.677	25.484	1.00	11.88	C
ATOM	1255	CB	ILE	169	23.066	23.981	26.341	1.00	11.98	C
ATOM	1256	CG2	ILE	169	21.827	24.063	25.458	1.00	10.87	C
ATOM	1257	CG1	ILE	169	22.884	22.876	27.388	1.00	12.11	C
ATOM	1258	CD1	ILE	169	21.764	23.136	28.368	1.00	15.39	C
ATOM	1259	C	ILE	169	24.511	24.789	24.464	1.00	11.43	C
ATOM	1260	O	ILE	169	24.838	25.920	24.818	1.00	11.73	O
ATOM	1261	N	PRO	170	24.305	24.483	23.177	1.00	11.01	N
ATOM	1262	CD	PRO	170	24.038	23.151	22.604	1.00	11.18	C
ATOM	1263	CA	PRO	170	24.479	25.476	22.116	1.00	11.33	C
ATOM	1264	CB	PRO	170	24.715	24.610	20.885	1.00	11.83	C
ATOM	1265	CG	PRO	170	23.792	23.465	21.133	1.00	13.40	C
ATOM	1266	C	PRO	170	23.330	26.448	21.883	1.00	11.29	C
ATOM	1267	O	PRO	170	22.214	26.263	22.379	1.00	10.59	O
ATOM	1268	N	GLY	171	23.652	27.491	21.123	1.00	11.19	N
ATOM	1269	CA	GLY	171	22.698	28.501	20.697	1.00	11.14	C
ATOM	1270	C	GLY	171	21.778	29.232	21.648	1.00	11.25	C
ATOM	1271	O	GLY	171	20.762	29.768	21.211	1.00	13.38	O
ATOM	1272	N	GLY	172	22.106	29.275	22.929	1.00	11.90	N
ATOM	1273	CA	GLY	172	21.244	29.990	23.851	1.00	11.26	C
ATOM	1274	C	GLY	172	20.036	29.218	24.340	1.00	9.57	C
ATOM	1275	O	GLY	172	19.186	29.775	25.027	1.00	10.74	O
ATOM	1276	N	TRP	173	19.930	27.944	23.975	1.00	8.79	N
ATOM	1277	CA	TRP	173	18.812	27.136	24.453	1.00	8.91	C
ATOM	1278	CB	TRP	173	18.786	25.780	23.743	1.00	7.81	C
ATOM	1279	CG	TRP	173	17.900	25.705	22.531	1.00	7.33	C
ATOM	1280	CD2	TRP	173	18.321	25.695	21.161	1.00	8.98	C
ATOM	1281	CE2	TRP	173	17.162	25.526	20.368	1.00	7.66	C
ATOM	1282	CE3	TRP	173	19.564	25.808	20.525	1.00	8.72	C
ATOM	1283	CD1	TRP	173	16.542	25.558	22.515	1.00	8.63	C
ATOM	1284	NE1	TRP	173	16.091	25.445	21.220	1.00	8.63	N
ATOM	1285	CZ2	TRP	173	17.210	25.465	18.971	1.00	9.33	C
ATOM	1286	CZ3	TRP	173	19.613	25.747	19.134	1.00	9.26	C
ATOM	1287	CH2	TRP	173	18.441	25.576	18.374	1.00	8.65	C
ATOM	1288	C	TRP	173	19.072	26.906	25.942	1.00	8.99	C
ATOM	1289	O	TRP	173	20.195	26.577	26.330	1.00	10.30	O
ATOM	1290	N	PRO	174	18.055	27.104	26.797	1.00	9.18	N
ATOM	1291	CD	PRO	174	16.733	27.712	26.564	1.00	8.49	C
ATOM	1292	CA	PRO	174	18.293	26.879	28.226	1.00	10.33	C
ATOM	1293	CB	PRO	174	17.066	27.504	28.886	1.00	10.06	C
ATOM	1294	CG	PRO	174	15.998	27.375	27.846	1.00	10.98	C
ATOM	1295	C	PRO	174	18.468	25.394	28.551	1.00	9.15	C
ATOM	1296	O	PRO	174	19.068	25.033	29.563	1.00	9.57	O
ATOM	1297	N	TYR	175	17.948	24.534	27.684	1.00	10.20	N
ATOM	1298	CA	TYR	175	18.071	23.095	27.881	1.00	10.16	C
ATOM	1299	CB	TYR	175	17.121	22.620	28.993	1.00	11.19	C
ATOM	1300	CG	TYR	175	15.667	22.974	28.768	1.00	12.94	C
ATOM	1301	CD1	TYR	175	14.867	22.219	27.911	1.00	14.57	C
ATOM	1302	CE1	TYR	175	13.537	22.565	27.673	1.00	17.55	C
ATOM	1303	CD2	TYR	175	15.098	24.088	29.386	1.00	14.26	C
ATOM	1304	CE2	TYR	175	13.770	24.445	29.152	1.00	17.15	C
ATOM	1305	CZ	TYR	175	12.997	23.681	28.295	1.00	18.44	C
ATOM	1306	OH	TYR	175	11.687	24.034	28.054	1.00	23.24	O
ATOM	1307	C	TYR	175	17.763	22.355	26.593	1.00	9.65	C
ATOM	1308	O	TYR	175	17.024	22.853	25.742	1.00	11.27	O
ATOM	1309	N	GLN	176	18.352	21.174	26.439	1.00	9.52	N

ATOM	1310	CA	GLN	176	18.090	20.362	25.258	1.00	8.13	C
ATOM	1311	CB	GLN	176	19.233	19.362	25.005	1.00	7.43	C
ATOM	1312	CG	GLN	176	19.262	18.117	25.906	1.00	9.56	C
ATOM	1313	CD	GLN	176	19.696	18.400	27.333	1.00	10.95	C
ATOM	1314	OE1	GLN	176	20.252	19.458	27.635	1.00	10.47	O
ATOM	1315	NE2	GLN	176	19.457	17.439	28.219	1.00	10.12	N
ATOM	1316	C	GLN	176	16.797	19.619	25.554	1.00	8.54	C
ATOM	1317	O	GLN	176	16.491	19.340	26.713	1.00	9.34	O
ATOM	1318	N	THR	177	16.017	19.334	24.518	1.00	6.84	N
ATOM	1319	CA	THR	177	14.772	18.600	24.705	1.00	7.88	C
ATOM	1320	CB	THR	177	13.739	18.965	23.617	1.00	9.25	C
ATOM	1321	OG1	THR	177	13.229	20.276	23.885	1.00	8.90	O
ATOM	1322	CG2	THR	177	12.580	17.979	23.609	1.00	9.74	C
ATOM	1323	C	THR	177	15.107	17.116	24.656	1.00	6.97	C
ATOM	1324	O	THR	177	14.504	16.312	25.357	1.00	8.72	O
ATOM	1325	N	ILE	178	16.082	16.768	23.824	1.00	6.99	N
ATOM	1326	CA	ILE	178	16.542	15.388	23.694	1.00	7.43	C
ATOM	1327	CB	ILE	178	15.949	14.688	22.436	1.00	6.61	C
ATOM	1328	CG2	ILE	178	16.615	13.318	22.225	1.00	7.88	C
ATOM	1329	CG1	ILE	178	14.436	14.521	22.601	1.00	6.97	C
ATOM	1330	CD1	ILE	178	13.731	14.003	21.357	1.00	7.08	C
ATOM	1331	C	ILE	178	18.060	15.426	23.580	1.00	7.88	C
ATOM	1332	O	ILE	178	18.625	16.317	22.941	1.00	8.07	O
ATOM	1333	N	TRP	179	18.711	14.474	24.235	1.00	7.85	N
ATOM	1334	CA	TRP	179	20.158	14.369	24.207	1.00	7.68	C
ATOM	1335	CB	TRP	179	20.709	14.408	25.642	1.00	7.90	C
ATOM	1336	CG	TRP	179	22.174	14.068	25.772	1.00	10.87	C
ATOM	1337	CD2	TRP	179	22.797	13.356	26.852	1.00	9.80	C
ATOM	1338	CE2	TRP	179.	24.179	13.295	26.572	1.00	12.35	C
ATOM	1339	CE3	TRP	179	22.318	12.764	28.028	1.00	11.98	C
ATOM	1340	CD1	TRP	179	23.178	14.400	24.907	1.00	10.87	C
ATOM	1341	NE1	TRP	179	24.386	13.940	25.381	1.00	13.54	N
ATOM	1342	CZ2	TRP	179	25.092	12.664	27.427	1.00	13.78	C
ATOM	1343	CZ3	TRP	179	23.226	12.137	28.880	1.00	13.89	C
ATOM	1344	CH2	TRP	179	24.596	12.093	28.572	1.00	14.50	C
ATOM	1345	C	TRP	179	20.520	13.054	23.537	1.00	7.91	C
ATOM	1346	O	TRP	179	20.119	11.990	24.007	1.00	7.14	O
ATOM	1347	N	GLN	180	21.237	13.122	22.420	1.00	6.87	N
ATOM	1348	CA	GLN	180	21.667	11.900	21.745	1.00	8.51	C
ATOM	1349	CB	GLN	180	21.885	12.145	20.254	1.00	8.86	C
ATOM	1350	CG	GLN	180	22.024	10.861	19.458	1.00	8.55	C
ATOM	1351	CD	GLN	180	22.312	11.111	17.998	1.00	9.58	C
ATOM	1352	OE1	GLN	180	21.514	10.760	17.120	1.00	10.55	O
ATOM	1353	NE2	GLN	180	23.453	11.727	17.725	1.00	6.56	N
ATOM	1354	C	GLN	180	22.989	11.601	22.443	1.00	8.91	C
ATOM	1355	O	GLN	180	24.011	12.217	22.141	1.00	10.17	O
ATOM	1356	N	ASN	181	22.958	10.658	23.383	1.00	9.68	N
ATOM	1357	CA	ASN	181	24.132	10.338	24.188	1.00	10.41	C
ATOM	1358	CB	ASN	181	23.684	10.006	25.620	1.00	11.20	C
ATOM	1359	CG	ASN	181	22.785	8.785	25.695	1.00	11.67	C
ATOM	1360	OD1	ASN	181	21.893	8.595	24.866	1.00	10.50	O
ATOM	1361	ND2	ASN	181	23.004	7.955	26.711	1.00	13.30	N
ATOM	1362	C	ASN	181	25.123	9.289	23.698	1.00	10.08	C
ATOM	1363	O	ASN	181	26.164	9.089	24.326	1.00	11.89	O
ATOM	1364	N	SER	182	24.816	8.621	22.594	1.00	9.13	N
ATOM	1365	CA	SER	182	25.732	7.620	22.045	1.00	10.97	C
ATOM	1366	CB	SER	182	25.771	6.368	22.926	1.00	11.32	C

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ATOM   1367   OG   SER   182        24.815    5.413   22.494   1.00  13.31          O
ATOM   1368   C    SER   182        25.295    7.206   20.653   1.00  11.47          C
ATOM   1369   O    SER   182        24.163    7.457   20.254   1.00  10.32          O
ATOM   1370   N    ASP   183        26.203    6.578   19.912   1.00  12.25          N
ATOM   1371   CA   ASP   183        25.873    6.087   18.584   1.00  13.41          C
ATOM   1372   CB   ASP   183        26.837    6.648   17.525   1.00  13.78          C
ATOM   1373   CG   ASP   183        28.274    6.182   17.713   1.00  17.53          C
ATOM   1374   OD1  ASP   183        29.104    6.511   16.841   1.00  19.16          O
ATOM   1375   OD2  ASP   183        28.580    5.499   18.713   1.00  16.78          O
ATOM   1376   C    ASP   183        25.953    4.565   18.640   1.00  13.37          C
ATOM   1377   O    ASP   183        26.274    3.907   17.653   1.00  13.86          O
ATOM   1378   N    ALA   184        25.643    4.014   19.810   1.00  13.11          N
ATOM   1379   CA   ALA   184        25.699    2.572   20.004   1.00  13.80          C
ATOM   1380   CB   ALA   184        27.040    2.189   20.624   1.00  16.07          C
ATOM   1381   C    ALA   184        24.562    2.037   20.861   1.00  13.38          C
ATOM   1382   O    ALA   184        24.794    1.285   21.810   1.00  13.77          O
ATOM   1383   N    TYR   185        23.331    2.420   20.536   1.00  11.77          N
ATOM   1384   CA   TYR   185        22.196    1.925   21.297   1.00  11.40          C
ATOM   1385   CB   TYR   185        20.891    2.531   20.782   1.00  10.32          C
ATOM   1386   CG   TYR   185        19.697    2.134   21.616   1.00   9.39          C
ATOM   1387   CD1  TYR   185        19.645    2.429   22.979   1.00  11.89          C
ATOM   1388   CE1  TYR   185        18.573    2.014   23.761   1.00  10.54          C
ATOM   1389   CD2  TYR   185        18.642    1.420   21.054   1.00   9.92          C
ATOM   1390   CE2  TYR   185        17.568    1.001   21.823   1.00   9.91          C
ATOM   1391   CZ   TYR   185        17.540    1.296   23.174   1.00  10.26          C
ATOM   1392   OH   TYR   185        16.493    0.847   23.942   1.00  11.74          O
ATOM   1393   C    TYR   185        22.186    0.404   21.134   1.00  10.98          C
ATOM   1394   O    TYR   185        22.426   -0.115   20.045   1.00  11.30          O
ATOM   1395   N    ALA   186        21.908   -0.300   22.225   1.00  11.84          N
ATOM   1396   CA   ALA   186        21.913   -1.759   22.235   1.00  12.07          C
ATOM   1397   CB   ALA   186        21.536   -2.254   23.623   1.00  12.39          C
ATOM   1398   C    ALA   186        21.055   -2.459   21.187   1.00  11.62          C
ATOM   1399   O    ALA   186        21.349   -3.592   20.804   1.00  11.83          O
ATOM   1400   N    TYR   187        20.004   -1.800   20.717   1.00   9.84          N
ATOM   1401   CA   TYR   187        19.130   -2.418   19.728   1.00  10.86          C
ATOM   1402   CB   TYR   187        17.677   -2.305   20.189   1.00  10.13          C
ATOM   1403   CG   TYR   187        17.450   -3.136   21.425   1.00  12.45          C
ATOM   1404   CD1  TYR   187        17.157   -4.496   21.328   1.00  13.09          C
ATOM   1405   CE1  TYR   187        17.091   -5.301   22.463   1.00  13.41          C
ATOM   1406   CD2  TYR   187        17.662   -2.598   22.693   1.00  13.25          C
ATOM   1407   CE2  TYR   187        17.602   -3.394   23.836   1.00  14.36          C
ATOM   1408   CZ   TYR   187        17.320   -4.743   23.712   1.00  15.74          C
ATOM   1409   OH   TYR   187        17.296   -5.539   24.835   1.00  18.27          O
ATOM   1410   C    TYR   187        19.316   -1.851   18.338   1.00  10.52          C
ATOM   1411   O    TYR   187        18.561   -2.171   17.417   1.00  11.05          O
ATOM   1412   N    GLY   188        20.348   -1.028   18.191   1.00  10.42          N
ATOM   1413   CA   GLY   188        20.648   -0.438   16.905   1.00   9.94          C
ATOM   1414   C    GLY   188        20.537    1.069   16.897   1.00   9.64          C
ATOM   1415   O    GLY   188        19.737    1.651   17.634   1.00   9.70          O
ATOM   1416   N    GLY   189        21.359    1.702   16.070   1.00   9.18          N
ATOM   1417   CA   GLY   189        21.318    3.148   15.962   1.00   8.40          C
ATOM   1418   C    GLY   189        21.916    3.889   17.138   1.00   8.61          C
ATOM   1419   O    GLY   189        22.749    3.361   17.879   1.00   9.23          O
ATOM   1420   N    ASP   190        21.462    5.125   17.314   1.00   8.98          N
ATOM   1421   CA   ASP   190        21.955    5.985   18.376   1.00   7.79          C
ATOM   1422   CB   ASP   190        22.143    7.410   17.848   1.00   8.75          C
ATOM   1423   CG   ASP   190        22.835    7.447   16.502   1.00  11.97          C
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ATOM	1424	OD1	ASP	190	22.174	7.796	15.499	1.00	11.71	O
ATOM	1425	OD2	ASP	190	24.039	7.123	16.444	1.00	13.72	O
ATOM	1426	C	ASP	190	21.014	6.033	19.570	1.00	8.07	C
ATOM	1427	O	ASP	190	19.797	5.899	19.426	1.00	8.11	O
ATOM	1428	N	SER	191	21.595	6.241	20.747	1.00	6.76	N
ATOM	1429	CA	SER	191	20.835	6.342	21.984	1.00	7.16	C
ATOM	1430	CB	SER	191	21.705	5.923	23.175	1.00	7.45	C
ATOM	1431	OG	SER	191	21.006	6.083	24.398	1.00	10.31	O
ATOM	1432	C	SER	191	20.382	7.786	22.178	1.00	7.71	C
ATOM	1433	O	SER	191	21.107	8.725	21.839	1.00	8.62	O
ATOM	1434	N	ASN	192	19.180	7.956	22.720	1.00	6.87	N
ATOM	1435	CA	ASN	192	18.636	9.283	22.985	1.00	7.04	C
ATOM	1436	CB	ASN	192	17.598	9.676	21.926	1.00	7.32	C
ATOM	1437	CG	ASN	192	18.204	9.877	20.556	1.00	7.96	C
ATOM	1438	OD1	ASN	192	18.936	10.840	20.316	1.00	7.44	O
ATOM	1439	ND2	ASN	192	17.893	8.969	19.643	1.00	6.04	N
ATOM	1440	C	ASN	192	17.960	9.308	24.346	1.00	7.80	C
ATOM	1441	O	ASN	192	17.365	8.316	24.776	1.00	7.90	O
ATOM	1442	N	ILE	193	18.059	10.447	25.020	1.00	7.29	N
ATOM	1443	CA	ILE	193	17.435	10.632	26.318	1.00	8.73	C
ATOM	1444	CB	ILE	193	18.492	10.829	27.431	1.00	9.96	C
ATOM	1445	CG2	ILE	193	17.803	11.083	28.766	1.00	10.62	C
ATOM	1446	CG1	ILE	193	19.397	9.598	27.515	1.00	11.43	C
ATOM	1447	CD1	ILE	193	18.688	8.329	27.932	1.00	15.22	C
ATOM	1448	C	ILE	193	16.557	11.876	26.259	1.00	8.85	C
ATOM	1449	O	ILE	193	17.059	12.984	26.069	1.00	10.09	O
ATOM	1450	N	PHE	194	15.248	11.687	26.397	1.00	8.48	N
ATOM	1451	CA	PHE	194	14.320	12.807	26.386	1.00	9.19	C
ATOM	1452	CB	PHE	194	12.893	12.327	26.106	1.00	10.35	C
ATOM	1453	CG	PHE	194	11.846	13.383	26.324	1.00	10.08	C
ATOM	1454	CD1	PHE	194	11.693	14.434	25.424	1.00	10.74	C
ATOM	1455	CD2	PHE	194	11.034	13.342	27.452	1.00	10.83	C
ATOM	1456	CE1	PHE	194	10.748	15.430	25.646	1.00	9.61	C
ATOM	1457	CE2	PHE	194	10.085	14.332	27.687	1.00	10.48	C
ATOM	1458	CZ	PHE	194	9.938	15.379	26.785	1.00	9.68	C
ATOM	1459	C	PHE	194	14.398	13.458	27.761	1.00	9.55	C
ATOM	1460	O	PHE	194	14.278	12.786	28.787	1.00	9.71	O
ATOM	1461	N	ASN	195	14.598	14.771	27.764	1.00	10.46	N
ATOM	1462	CA	ASN	195	14.737	15.554	28.985	1.00	9.73	C
ATOM	1463	CB	ASN	195	15.567	16.800	28.664	1.00	10.61	C
ATOM	1464	CG	ASN	195	15.906	17.611	29.892	1.00	12.04	C
ATOM	1465	OD1	ASN	195	15.877	17.103	31.011	1.00	12.56	O
ATOM	1466	ND2	ASN	195	16.249	18.878	29.687	1.00	13.04	N
ATOM	1467	C	ASN	195	13.387	15.937	29.588	1.00	10.29	C
ATOM	1468	O	ASN	195	12.969	17.096	29.543	1.00	12.92	O
ATOM	1469	N	GLY	196	12.707	14.947	30.153	1.00	10.67	N
ATOM	1470	CA	GLY	196	11.412	15.189	30.756	1.00	10.88	C
ATOM	1471	C	GLY	196	10.726	13.895	31.138	1.00	11.94	C
ATOM	1472	O	GLY	196	11.253	12.806	30.910	1.00	11.46	O
ATOM	1473	N	SER	197	9.538	14.021	31.718	1.00	12.51	N
ATOM	1474	CA	SER	197	8.754	12.874	32.149	1.00	13.41	C
ATOM	1475	CB	SER	197	7.692	13.327	33.147	1.00	13.72	C
ATOM	1476	OG	SER	197	6.706	14.107	32.486	1.00	15.49	O
ATOM	1477	C	SER	197	8.054	12.202	30.978	1.00	14.07	C
ATOM	1478	O	SER	197	8.070	12.707	29.851	1.00	14.54	O
ATOM	1479	N	ALA	198	7.427	11.062	31.254	1.00	14.16	N
ATOM	1480	CA	ALA	198	6.690	10.334	30.235	1.00	14.55	C

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ATOM   1481  CB   ALA   198      6.143    9.030   30.808  1.00  16.06           C
ATOM   1482  C    ALA   198      5.546   11.227   29.762  1.00  14.85           C
ATOM   1483  O    ALA   198      5.199   11.237   28.581  1.00  15.22           O
ATOM   1484  N    ASP   199      4.963   11.982   30.692  1.00  15.71           N
ATOM   1485  CA   ASP   199      3.869   12.878   30.351  1.00  16.39           C
ATOM   1486  CB   ASP   199      3.186   13.400   31.617  1.00  18.73           C
ATOM   1487  CG   ASP   199      2.405   12.320   32.340  1.00  22.32           C
ATOM   1488  OD1  ASP   199      1.633   11.601   31.672  1.00  24.38           O
ATOM   1489  OD2  ASP   199      2.553   12.194   33.574  1.00  24.85           O
ATOM   1490  C    ASP   199      4.367   14.041   29.501  1.00  14.37           C
ATOM   1491  O    ASP   199      3.662   14.505   28.604  1.00  16.39           O
ATOM   1492  N    ASN   200      5.580   14.510   29.786  1.00  14.50           N
ATOM   1493  CA   ASN   200      6.170   15.606   29.021  1.00  14.34           C
ATOM   1494  CB   ASN   200      7.531   16.008   29.608  1.00  16.81           C
ATOM   1495  CG   ASN   200      7.415   16.750   30.932  1.00  18.36           C
ATOM   1496  OD1  ASN   200      8.407   16.922   31.646  1.00  19.27           O
ATOM   1497  ND2  ASN   200      6.209   17.204   31.261  1.00  20.30           N
ATOM   1498  C    ASN   200      6.358   15.129   27.579  1.00  13.68           C
ATOM   1499  O    ASN   200      6.080   15.862   26.629  1.00  13.67           O
ATOM   1500  N    LEU   201      6.828   13.893   27.424  1.00  13.05           N
ATOM   1501  CA   LEU   201      7.043   13.321   26.098  1.00  13.07           C
ATOM   1502  CB   LEU   201      7.687   11.936   26.216  1.00  12.49           C
ATOM   1503  CG   LEU   201      7.913   11.195   24.895  1.00  10.80           C
ATOM   1504  CD1  LEU   201      8.858   11.993   24.012  1.00  11.72           C
ATOM   1505  CD2  LEU   201      8.478    9.811   25.172  1.00  11.74           C
ATOM   1506  C    LEU   201      5.713   13.212   25.362  1.00  13.29           C
ATOM   1507  O    LEU   201      5.610   13.543   24.180  1.00  12.56           O
ATOM   1508  N    LYS   202      4.691   12.742   26.070  1.00  14.51           N
ATOM   1509  CA   LYS   202      3.366   12.609   25.490  1.00  16.48           C
ATOM   1510  CB   LYS   202      2.402   11.997   26.513  1.00  18.20           C
ATOM   1511  CG   LYS   202      0.936   12.025   26.097  1.00  22.02           C
ATOM   1512  CD   LYS   202      0.689   11.391   24.723  1.00  24.57           C
ATOM   1513  CE   LYS   202      0.996    9.898   24.690  1.00  25.25           C
ATOM   1514  NZ   LYS   202      2.447    9.604   24.852  1.00  30.75           N
ATOM   1515  C    LYS   202      2.858   13.975   25.041  1.00  15.17           C
ATOM   1516  O    LYS   202      2.215   14.094   24.000  1.00  16.19           O
ATOM   1517  N    LYS   203      3.151   15.006   25.829  1.00  16.12           N
ATOM   1518  CA   LYS   203      2.723   16.357   25.492  1.00  15.85           C
ATOM   1519  CB   LYS   203      3.015   17.316   26.651  1.00  17.64           C
ATOM   1520  CG   LYS   203      2.681   18.777   26.349  1.00  19.96           C
ATOM   1521  CD   LYS   203      1.220   18.953   25.953  1.00  22.07           C
ATOM   1522  CE   LYS   203      0.925   20.385   25.530  1.00  23.77           C
ATOM   1523  NZ   LYS   203     -0.495   20.558   25.101  1.00  25.53           N
ATOM   1524  C    LYS   203      3.415   16.843   24.221  1.00  14.94           C
ATOM   1525  O    LYS   203      2.802   17.520   23.395  1.00  14.08           O
ATOM   1526  N    LEU   204      4.691   16.499   24.068  1.00  12.99           N
ATOM   1527  CA   LEU   204      5.442   16.888   22.879  1.00  11.93           C
ATOM   1528  CB   LEU   204      6.900   16.430   23.002  1.00   9.68           C
ATOM   1529  CG   LEU   204      7.793   16.630   21.772  1.00  10.48           C
ATOM   1530  CD1  LEU   204      7.866   18.106   21.414  1.00  11.99           C
ATOM   1531  CD2  LEU   204      9.178   16.079   22.063  1.00   9.82           C
ATOM   1532  C    LEU   204      4.798   16.238   21.655  1.00  11.58           C
ATOM   1533  O    LEU   204      4.709   16.845   20.588  1.00  11.99           O
ATOM   1534  N    ALA   205      4.346   14.998   21.821  1.00  12.01           N
ATOM   1535  CA   ALA   205      3.715   14.259   20.736  1.00  11.35           C
ATOM   1536  CB   ALA   205      3.646   12.771   21.094  1.00  13.25           C
ATOM   1537  C    ALA   205      2.317   14.773   20.384  1.00  13.32           C
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ATOM    1538  O    ALA  205       2.007  14.989  19.216  1.00 13.11           O
ATOM    1539  N    THR  206       1.475  14.967  21.394  1.00 16.51           N
ATOM    1540  CA   THR  206       0.111  15.436  21.165  1.00 17.20           C
ATOM    1541  CB   THR  206      -0.775  15.228  22.410  1.00 18.27           C
ATOM    1542  OG1  THR  206      -0.287  16.044  23.482  1.00 17.54           O
ATOM    1543  CG2  THR  206      -0.763  13.768  22.838  1.00 19.40           C
ATOM    1544  C    THR  206       0.039  16.913  20.798  1.00 18.11           C
ATOM    1545  O    THR  206      -0.814  17.323  20.010  1.00 18.79           O
ATOM    1546  N    GLY  207       0.938  17.704  21.374  1.00 20.26           N
ATOM    1547  CA   GLY  207       0.941  19.130  21.120  1.00 22.32           C
ATOM    1548  C    GLY  207      -0.010  19.809  22.088  1.00 24.16           C
ATOM    1549  O    GLY  207      -0.783  19.089  22.756  1.00 26.06           O
ATOM    1550  OT   GLY  207       0.012  21.053  22.183  1.00 26.83           O
END
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